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INTELLECTUAL CAPITAL AND BANKING SECTOR OF PAKISTAN

MUHAMMAD KHALIQUE
LECTURER
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITI MALAYSIA SARAWAK
MALAYSIA

JAMAL ABDUL NASSIR BIN SHAARI
SR. LECTURER
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITI MALAYSIA SARAWAK
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DR. ABU HASSAN MD. ISA
PROFESSOR & HEAD
DEPARTMENT OF ACCOUNTING AND FINANCE
FACULTY OF ECONOMICS AND BUSINESS
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MALAYSIA

MOHAMMED ALKALI
RESEARCH SCHOLAR
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITI MALAYSIA SARAWAK
MALAYSIA

ABSTRACT

At the early years of 21st Century were intellectual capital is appeared as a most important and prime asset of an organization to take competitive advantages in the market. Building on the literature, related theories and organizational capabilities, this paper attempts to develops and tests a conceptual framework that identify the influence of intellectual capital on the organizational performance of banking sector in Islamabad, Pakistan. This study employs quantitative analyses. For sample selection random sampling technique was used. The data were collected through structured questionnaires form. To investigate the influence of intellectual capital on the organizational performance of banking sector, Pearson Correlation and Multiple Regression were employed. The main conclusion from this study was derived; intellectual capital has positive significant influence on the organizational performance of banking sector in Islamabad, Pakistan. The contribution of this study is particularly valuable for international intellectual capital researchers. This study also offers recommendations regarding empirical applications of intellectual capital in banking sector.

KEYWORDS

Intellectual capital, human capital, customer capital, structural capital, Organizational performance.

INTRODUCTION

In a knowledge-based economy the performance and survival of organizations are determined by the speed at which the organization develops their intellectual capital. Intellectual capital is considered as the knowledge based competencies and the major competitive advantage of organization exist in its intellectual capital. In production-based economy land, labor, capital and physical assets have vital role while in a knowledge-based economy intellectual capital has a pivot position. Lonnqvist, Kujansivu and Sillanpaa (2008) argue that in a knowledge-based economy intellectual capital (IC) is an important source of wealth creation in organizations as well as in society more generally. In addition they argue that in some industries or business services intellectual capital has more values than of its traditional assets. Shaari, Khalique and Isa (2010) stipulate that intellectual capital is recognized as the most important source of competitive advantage of various organizations which lead to increase the business performance and a country's economic growth. According to Cohen and Kaimenakis (2007), Chong and Lin (2008) and Tovstiga and Tulugurova (2009) intellectual capital is appeared as the most vital source to enhance the organizational performance of organizations.

Despite the importance of intellectual capital in financial organizations; Shih, Chang and Lin (2010) identified that there are little studies that focused on the relationship of intellectual capital with the organizational performance of banking industry. Banking industry is a backbone of economy and it has very important for the development of economy. The role of banking industry in economy is highly acknowledged and appreciated. Mavridis (2004) pointed out that banking sector around the world has grown as a knowledge concentrated sector in dynamic and competitive environment.

Mavridis (2004) and Kubo and Saka (2002) argue that the banking sector can be a good sector for the research of intellectual capital. They supported that this sector is base on knowledge intensive and its entire staff are moreover are identical intellectually and professionally. According to Cabrita and Bontis (2008) from the last decade, the banking sector has been undergoing dramatic change in both structural and technological advancement. These threats are pushing top management to restructure their business strategies. This notion is also supported by Bhartesh and Bandyopadhyay (2005) who pointed out that it is essential for organizations to understand their intellectual capital and should need to be properly managed if the organizations want to stay in competitive environment. Therefore, it is essential that the top level management of the banking industry learns to employ the intellectual capital effectively and efficiently to improve their organizational performance in a knowledge-based economy.

Pakistan is situated in South Asia. Pakistan is a developing country and sixth largest populous country in the world. Pakistan has India and China, the two most populous countries of the world, her neighbor. Due to its large population size, it is a potential attraction market for many commercial activities (Ahmed and Ahmad, 2008). There is no-doubt that a well structured, efficient organized and feasible financial system is a prerequisite for the economic development of any economy. Anwar, Shabir and Hussain (2010) indentified that the financial sector is performing a critical role in the development activities and economic growth

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of country. A well structured and based on efficient networking banking sector and stock market lead faster growth over the period as compared to those countries having poor financial system (Levine 1997). Beck, Demirguc-Kunt and Levine (2000) and Ang (2008) also has similar findings and they concluded that the role of banking sector is highly correlated with the development of economic activities.

The financial sector of Pakistan comprises on commercial banks, foreign banks, development finance institutions, microfinance companies, leasing companies, investment banks, discount houses, housing finance companies, venture capital companies, mutual funds), modarabas, stock exchanges and insurance companies (Ahmed and Ahmad, 2008). Financial sector of Pakistan faced revolutionary changes therefore, a wide scoped program of reforms were launched in 1990 to neutralized these challenges, but the pace of these reforms were enhanced manifold since 2000 (Anwar et al., 2010). Ahmed and Ahmad (2008) argued that in Pakistan the financial sector plays a formidable role in economic development. The role of financial sector in the development and progress of country's economy is highly acknowledged but in this scenario Pakistan seems to be bit unlucky due to lack of well established financial infrastructure (Rehman and Raoof, 2010). Many researchers recommended that in a knowledge-based economy intellectual capital is a critical factor for the success of the organizations. Few studies were found in banking sector that focused on the role of intellectual capital towards the organizational performance of banking industry. These studies include that conducted by Makki and Lodhi (2008), Sharri et al., (2010) and Kamath (2010) which were mainly considered the secondary data and used Value Added Intellectual Coefficient (VAIC) method. Therefore, in Pakistan there is a great dearth of research in the field of intellectual capital. This study mainly based on three components of intellectual capital namely, human capital, customer capital and structural capital which attempt to investigate the impact of the components of intellectual capital on the organizational performance of banking industry in Pakistan.

LITERATURE REVIEW

It is widely accepted that intellectual capital is a most important and vital asset for the survival of organizations in a competitive environment. Intellectual capital (IC) of a organization consists of a number of different intangible resources such as employees competences, skills, brands, patents, working environment, database, procedures, social values, intellectual property, industrial property and honesty (Edvinsson and Malone, 1997; Roos et al., 1997; Lonnqvist et al., 2008; Khalquie et al., 2010b). In addition Lonnqvist et al. (2008) argued that intellectual capital management (ICM) is a concept that includes various managerial approaches that can be utilized to measure, evaluate, control or develop a company's IC.

Shih et al. (2010) reported that the term intellectual capital was first introduced by Galbraith (1969), as a form of knowledge, intellect, and brainpower activity, which used knowledge to create value. In a knowledge-based economy the role and contribution of intellectual capital is widely accepted. Stewart (1997) pointed out that intellectual capital is referred as to the accumulation of all knowledge, skills and expertise of employees that can lead to take competitive advantages. Edvinsson and Sullivan (1996) also argue that intellectual capital is essentially defined as the knowledge assets that can be converted into value. In addition, Bontis (1998) illustrated that intellectual capital comprises three components: human capital, customer capital and structural capital. In intellectual capital field many researchers produced different models of intellectual capital such as Ismail (2004) proposed that intellectual capital model is based on human capital, customer capital, structural capital, technological capital and social capital. Ismail (2005) illustrated that intellectual capital model is based on human capital, customer capital, structural capital and spiritual capital. In the same way, Khalique, Shaari and Isa (2011a) proposed an integrated intellectual capital which is based on human capital, customer capital, structural capital, social capital, technological capital and spiritual capital. Past studies found that the components of intellectual capital have significant impact on the performance of organizations. Despite the importance of the other components of intellectual capital towards the performance of organizations the researcher apply only three components namely human capital, customer capital and structural capital in this study.

Human capital is the life blood of intellectual capital and source of innovation. It is mainly consist on the individual abilities, knowledge, know-how, talent, education, skills and experiences of employees in organizations (Bontis, Keow and Richardson, 2000; Edvinsson and Malone 1999; Shaari et al., 2010). Human capital is a critical factor that creates intellectual capital in organizations. Organizations cannot own human capital; it can be only hired in the form of employees.

Customer capital is another most important component of intellectual capital which also includes the organization's relationship with customers. The fundament purpose of this capital is to increase customer satisfaction, customary loyalty, organization's reputation, brand image (Bontis 1998; Edvinsson and Malone 1999; Stewart 1997, Khalique, Shaari, Isa and Ageel (2011b). Well established customer capital can lead to good organizational performance.

Structural capital is a Skelton of an organization. Like other components it is also one of the most important components of intellectual capital. It comprises on the internal structure of the organization such as the processes, procedures, guidelines and rules. It includes all non-human storehouse of knowledge in organizations including organizational competitive intelligence, routine, formula, policies, procedures and databases (Salleh and Selamat, 2007; Cabrita, 2009; Khalique, et al., 2011b).

RELATIONSHIP OF INTELLECTUAL CAPITAL WITH ORGANIZATIONAL PERFORMANCE

Past studies found that intellectual capital has significant influence on the performance of organizations. Bontis (1998) and Khalique, Shaari and Isa, (2011b) stipulated that the components of intellectual capital are the main sources of firm competitive advantage and superior performance. Bontis, (2002), Pablos, (2004) and Wang and Chang, (2005) identify that the impact of the components of intellectual capital on performance of organizations have different magnitudes. It has been found that intellectual capital has significant impact on the organizational performance (Bontis, 1998; Bontis et al., 2000; Cabrita and Bontis, 2008). In developed economies the concept and applications of intellectual capital has got significant attention. However, in developing economies the term intellectual capital is at embryonic stage. For example in Malaysia Bontis et al., (2000) started the research in intellectual capital domain. The findings of Bontis et al., (2000) suggested that intellectual capital has significant positive impact on the performance of organizations. Likewise, Goh (2005), Ting and Lean (2009), Muhammad and Ismail (2009) found the significant affect of intellectual capital on the organizational performance in Malaysian banking industries. In Bangladesh, Najibullah (2005) and Shiu (2006) concluded that intellectual capital has significant role increasing the performance of banking industry. In the summary, many literatures have indicated that intellectual capital has significant positive role enhancing the performance of banking industry.

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The main aim of the study was to identify the influence of the components of intellectual capital namely human capital, customer capital and structural capital on the organizational performance of banking sector in Pakistan. Researchers agreed that the intellectual capital is positively associated with the organizational performance of organizations (Bontis et al., 2000; Huang and Wu, 2010). The conceptual framework for this study is mainly based on three predictor variables namely human capital, customer capital, structural capital and one predicted variable, that is, organizational performance. It is hypothesized that there is a direct and positive association between intellectual capital and organizational performance (Stewart, 1997, Bontis et al., 2000, Huang and Wu, 2010; Khalique et al., 2011b). The relationship between the variables is depicted in Figure1.

FIGURE 1: CONCEPTUAL FRAMEWORK

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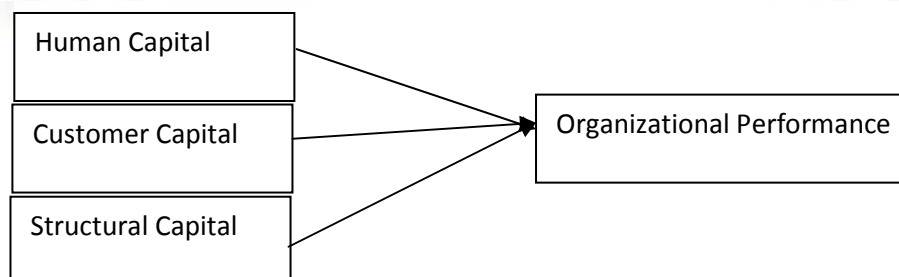
To achieve the objectives of the study following four research hypotheses were formulated.

Hypothesis 1: Human capital has positive association with organizational performance of banking sector in Pakistan

Hypothesis 2: Customer capital has positive association with organizational performance of banking sector in Pakistan

Hypothesis 3: Structural capital has positive association with organizational performance of banking sector in Pakistan

Hypothesis 4: Intellectual capital (human capital, customer capital and structural capital) has positive impact on the organizational performance of banking sector in Pakistan.

RESEARCH METHODOLOGY AND SAMPLE SIZE

The population of the study based on commercial banks in Islamabad. The banking sector was selected because this sector is considered as knowledge-intensive. The structured questionnaire based survey having 28 items was used to collect the data from targeted respondents. The amended version of Bontis, (1998), Ismail (2005), Young et al., (2007), Tovstiga and Tulugurova (2007) and Choudhury (2010) questionnaires items were used for this study. The amendments were made to ensure that the constructs is relevant to this research in Pakistani context. A total 400 set of questionnaires were distributed and 235 set of complete questionnaires were returned. Fifteen questionnaire forms were discarded due to incomplete information. Finally, 220 respondents were participated in the study with the net response rate was 55% which was consider as satisfactory.

RELIABILITY OF THE RESEARCH INSTRUMENT

Prior to the data analysis the data were screened and cleaned, to ensure the reliability of the instrument, Cronbach Alpha was used. Cronbach Alpha value is widely used to check the reliability of the construct. The results showed that human capital had a coefficient of 0.811, customer capital of 0.754, structural capital of 0.851 and organizational performance of 0.876. All constructs had showed above the suggested value 0.5 (Nunnally and Bernstein, 1994; Nunnally, 1974). Therefore, on the basis of reliability test it was assumed that the scales used in this research is reliable to capture the constructs. Reliability of the constructs is shown in Table 1.

TABLE 1: RELIABILITY TEST OF CONSTRUCTS

Variables	Number of items	Cronbach Alpha
Human Capital	5	0.811
Customer Capital	5	0.754
Structural Capital	5	0.851
Organizational Performance	12	0.876

FINDINGS

To test the first three research hypotheses Pearson correlation was applied. Table 2 shows that all of the predictor variables have positive and significant relationship with the organizational performance of banking sector. The findings represent that structural capital has more positive relationship with organizational performance as compared to other variables. The results of the study depict that the value of the Pearson correlation human capital is the second variable and customer capital is the third variable that shows positive relationship with organizational performance. Therefore, the findings supported the first three research hypotheses of the study. The findings also show that the coefficient correlation value of variables were below 0.9. It demonstrates that there is no multicolinearity in the study variables. The result of Pearson correlation is depicted in Table 2.

TABLE 2: PEARSON CORRELATION

Variables	HUC	CUC	STC	ORGP
Human Capital (HUC)	1			
Customer Capital (CUC)	0.397**	1		
Structural Capital (STC)	0.492**	0.459**	1	
Organizational Performance (ORGP)	0.486**	0.456**	0.507**	1

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

REGRESSION ANALYSIS

To test the research hypothesis 4 of this study, multiple regression analysis was used. Namvar, Fathian, Akhavan and Gholamian (2010) argue that the coefficient of determination (R^2) indicates the goodness of the fit of the regression model. The findings of the study showed that 36.9% (R square = 0.369) of the variance in organizational performance was jointly explained by the three independent variables (F = 19.11; Sig. = 0.01). The result revealed that the research hypothesis 4 is also supported. It concludes that the model is useful. The results of multiple regression are indicated in Table 3.

TABLE 3: MODEL SUMMARY: AGGREGATE EFFECT OF INDEPENDENT VARIABLES ON THE DEPENDENT VARIABLE

Variables	Dependent Variable: Organizational Performance		
	Unstandardized Coefficients	t- value	Significant level
Constant (β)	1.33	-	-
Human Capital	0.206	2.760	0.007
Customer Capital	0.217	2.446	0.016
Structural Capital	0.265	2.813	0.006
R-value	0.608		
R^2-value	0.369		
Std. Error of Estimate	0.458		
F value	19.11		0.000

Note: Unstandardized coefficient are reported along with t statistics at *=P<.05

The findings indicates that all variable namely human capital, customer capital and structural capital have significant impact on the organizational performance of banking sector at 95% confidence level with unstandardized beta coefficient of 0.206 (p = 0.007), 0.217 (p = 0.016) and 0.265 (p = 0.006) respectively.

CONCLUSION

The findings of this study express that there is a positive relationship between the components of intellectual capital (human capital, customer and structural capital) and organizational performance. The research evaluates the role of intellectual capital is highly significant to enhance the performance of organizations. Similarly the results of multiple regression also suggested that the components of intellectual capital has jointly significant positive impact on the organizational performance. The findings of this study supported that intellectual capital has dazing affect in enhancing the performance of banking sector in Pakistan. The findings of the study will be helpful to the policy makers to understand and apply their organizational intellectual capital effectively and efficiently. Further the findings of this study may provide foundation for policy guideline for organizations to explore and strengthen their intellectual capital to be established as a well developed financial sector. Undoubtedly, a well developed financial sector is essential to economic development and sustainable development of the economy.

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ASSESSMENT OF ENTREPRENEURSHIP INTENTION AMONG AGRICULTURAL STUDENTS OF RAZI UNIVERSITY

ABDOLHAMID PAPZAN
ASSOCIATE PROFESSOR
AGRICULTURAL COLLEGE
RAZI UNIVERSITY
IRAN

KOBRA ARKAVAZI
STUDENT
AGRICULTURAL EXTENSION AND EDUCATION COLLEGE
RAZI UNIVERSITY
IRAN

MALIHE SADAT AKHAVAN KAZEMI
STUDENT
AGRICULTURAL EXTENSION AND EDUCATION COLLEGE
RAZI UNIVERSITY
IRAN

ABSTRACT

The main purpose of this descriptive-correlative study was comparison of entrepreneurship intention among agricultural student of Razi University. Population of this study were undergraduate students in 1390 at faculty of agriculture (N= 1128). 285 of them were selected by stratified random sampling and proportionate as sample. Data collection tools of this research was a structured questionnaire that it's validity confirmed by panel of experts. In order to measure reliability of research tool, Cronbach's Alpha coefficient was calculated, this calculated Alfa was 0.71 which shows it's acceptable credit. For data analysis, descriptive statistics, ANOVA, independent t-test and Pearson correlation were used. Results indicated, there isn't significant relation between educational disciplines and student gender with entrepreneurship intention, while the relation between attitude towards entrepreneurship, social norms, self-efficacy and student's entrepreneurship intention is positive and significant.

KEYWORDS
entrepreneurship intention, self-efficacy, attitude, social norms.

INTRODUCTION

Since manpower is considered as finite resource and development center, training skilled and efficient people is essential to achieve sustainable development. Several studies have shown that, job creation is one of the most important approaches of economic development, and entrepreneurship is it's tool and procedure. In modern economy unlike traditional structures, due to significant growth in labor supply and slight growth in labor demand, job creation is not government task. The role of government is only spread enterprise culture and developed public and legal infrastructure for appropriate employment opportunities. Discovery and exploitation of these opportunities is entrepreneur's responsibility (Hezarjaribi, 2006).

Since today, graduated people comprise the main part of unemployed and one of the different communities challenges is graduated people who don't have individual abilities and skills, to set up a proper business also as regards unemployment in various disciplines University graduates will make irreversible Social, economic, and political consequences; One of the main problems of Iran's higher education system and especially Agriculture is development of entrepreneurship among students and graduates.

Entrepreneurship reduces unemployment, increase people and resources productivity and ultimately increase people income. So paying attention to student's intention and willingness to entrepreneurship and entrepreneurial activities is important in Survey their current situation and make necessary recommendations to improve the entrepreneurial development.

Entrepreneurship intention can be known as introduction and effective factor on entrepreneurship behavior or decision to be entrepreneur. Based on Ajzen planned model, attitude, social norms and self-efficacy belief are entrepreneurship intention Predictors. So in present study, Ajzen model has been used for assessment of student's entrepreneurship intention.

LITERATURE REVIEW

The entrepreneurship word is derived from " entreprendre " the French word that means "committing". According to Webster dictionary, entrepreneur is someone who committed to organize, manage and accept the risks of an economic activity (Rezvani & Najarzade, 2009).

According to Timonz (1990), entrepreneurship is creating a valuable thing from nothing and entrepreneur is a person who has high power of understanding and ability for opportunity finding, also by training his own thought, idea and convert it to a new product or service, he can make a value from nothing(Samadi & Shirzadi Esfahani, 2008).

Pooratashi (2009) quoted from Merdit et al., the entrepreneur as a person with ability to see business opportunities, evaluate them, gather necessary resources and exploit them and plan appropriate operations for reaching success.

Entrepreneur is a Self-employed person who has good economic forecasting power, willingness to risk and through this make profit or loss. As result, help to balance and stability of market economy (Alibeigi et al., 2009).

Extensive studies have been done on factors affecting entrepreneurship, some of them have studied gender effect on entrepreneurial behavior and others considered educational field as a factor that can be effective on entrepreneurship tendency, so for desired goals of this study, some of these researches have examined.

Abarghuee and Bitaraf Sani (2009) in their own research concluded, gender has an impact on student entrepreneurship and it's rate among male students is more than female students. In a study that was done by Hosseini and Azizi (2008), results of Mann Whitney test indicate that male student's entrepreneurial spirit is higher than female ones. Also, Qavami and Lotfalipour (2009), in their study, concluded that there is a significant relation between entrepreneurship and

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gender so that entrepreneurship among men is more than women, while investigations of Raeesi et al. (2008), AkbarSadat (2007) and Jahanghiri and Kalantari (2008) indicated that there is not a significant relation between gender and entrepreneurship rate.

Alibeigi et al. (2009), express this subject that there isn't a significant difference between students of various fields in entrepreneurship spirit, also another research that has been done by Alibeigi(2009) about entrepreneurship spirit analysis among Razi university's students indicated that there isn't significant difference about entrepreneurship abilities among students of different colleges. Results of Saljooghi's study (2009), indicating the rate of entrepreneurship among scientific-applied students is not much different in terms of gender and educational degree, while there are differences between students of different academic disciplines and institutions.

Researches of Zarifian et al. (2009), Showed that there is no statistically significant differences among entrepreneurship of various disciplines students of Tabriz agricultural university, while the relationship between gender and desire entrepreneurship has been a positive and meaningful so that, the amount of male students entrepreneurship evaluated more than female students.

Rajabi et al. (2009), in investigation of effective factors on entrepreneurship behavior among scientific-applied students, concluded that there is a significant difference among students of different disciplines while the relation between gender and entrepreneurship attitude is not meaningful.

In order to measure entrepreneurship intention, many models have been revealed that among these, Ajzen's planes behavior theory (1991) used as the theoretical framework in many studies. This theory has a critical difference with other patterns that is social norms variable that in other patterns has not been pointed. According to Ajzen model, attitude to behavior, society norms and belief to self–efficacy are entrepreneurship intention predictors. Application of attitude variable in entrepreneurship intention studies is that, how much business is attractive in person's view. Society norm reflects social pressure and self-efficacy is person's believes about his own ability to perform roles and tasks of entrepreneurship (barani, 2009).

FIGURE 1- AJZEN'S PLANES BEHAVIOR MODEL
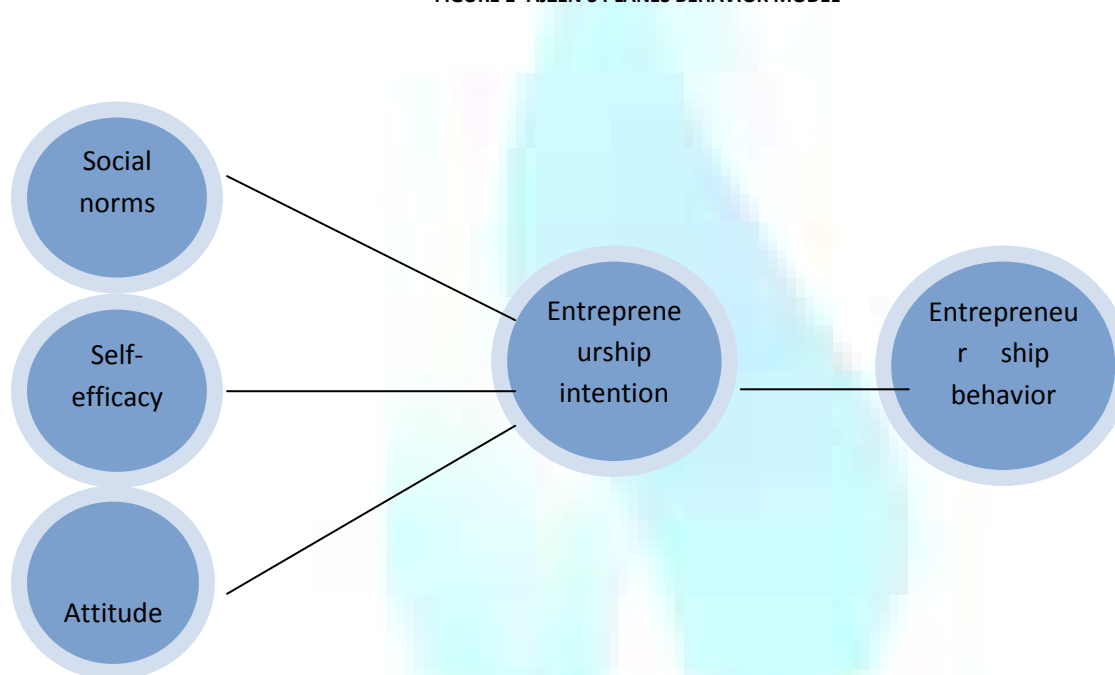
From the perspective of Bandura (1997), self-efficacy is believes that a person knows from his ability to deal with challenging situations. Boyd and Vozikis (1994), believe that the self-efficacy, influence on identifying opportunities, risk taking and entrepreneurial ideas development. Also based on social cognitive theory Lent et al. (2002), believe self-efficacy effects on items such as job selection, career development activities, professional abilities and job performance. Findings of Moriano and Gorgievski (2007), also indicate the positive and significant relation between self-efficacy and entrepreneurship intention.

Other factors affecting the willingness of the entrepreneurship, is society's norms. Society norms, insert in the societies culture. Dominant culture also influence on entrepreneurship (Barani et al., 1387). Results of Degeorge and Fayolle(2005), Moriano et al. (2006) also confirm positive and meaningful relation between social norms and entrepreneurship intention, while Linan's findings(2005), indicate negative and significant relation between social norms and entrepreneurship intention.

Drnovsek and Erikson (2005), believe when people understand entrepreneurship as a possible affair, it is more likely that their entrepreneurship intention be more stable, that indicate importance of attitude in entrepreneurship intention. The study of Barani et al. (1387), reveales positive relation between attitude toward entrepreneurship, social norms and belief to self-efficacy with entrepreneurship intention.

The main purpose of this study is, assessment of entrepreneurship intention among agricultural students of Razi University. According to this aim, the following purposes were considered:

1.   Assessment of relation between gender and entrepreneurship intention
2.   Assessment of relation between educational field and entrepreneurship intention
3.   Assessment of relation between society norms and entrepreneurship intention
4.   Assessment of relation between believe to self-efficacy and entrepreneurship intention
5.   Assessment of relation between students attitude and entrepreneurship intention

MATERIALS AND METHODS

This quantitative study has been done by descriptive-correlative approach. The study population consisted of all undergraduate students of Agricultural College of Razi University, which included 1128 student. In this study stratified random sampling techniques has been used. So that students have been selected based on their educational field by proportionate way (table 1). Sample size was determined 285 by means of Morgan table.

In order to data collection, structured questionnaires based on Ajzen model that include four parts: personal characteristics of respondents, Attitude towards entrepreneurship, social norms and believe in the self-efficacy is used. This study's variables was measured by 20 questions in the form of Likert range that including 7 ordinal scale (from completely agree to completely disagree).

To determine the validity of research tools the questionnaire was revealed to specialists and subject experts. In order to reliability check, Cronbach's Alpha coefficient was calculated. Since the calculated Alfa, for each part of questionnaire was higher than 0.71, so it has a good reliability. The collected data were analyzed by using SPSS11.5 and descriptive statistics (frequency, mean), Pearson correlation, ANOVA and independent t-test.

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TABLE 1- NUMBER OF SAMPLE BASED ON EDUCATIONAL DISCIPLINE

Educational discipline	Frequency	Percent
Plant protection	43	15.1
Agricultural machinery	43	15.1
Agricultural extension	43	15.1
Natural resource	21	7.4
Cultivation	36	12.6
Soil science	32	11.2
Animal husbandry	34	11.9
Water engineering	33	11.6
Total	285	100

FINDINGS

Results of this study indicated that the mean age of under study students is 21.46 year. 35.1 percent of students were male and 64.9 percent of them were female. Plant protection, Agricultural machinery and Agricultural extension with 43% allocated themselves, the largest number of respondents, while natural resource with 21% had included the lowest number of respondents.

In order to compare entrepreneurship intention among male and female students independent t-test and among students of different disciplines ANOVA test were used. F-test result showed that in regard to entrepreneurship intention among students of various field, there isn't significant difference (F= 0.383, sig= 0.912), also t-test result indicated there isn't significant difference between male and female students in regard to entrepreneurship intention. But comparison of mean of two groups showed, entrepreneurship intention among male students (79.65) is more than female ones (78.36).

TABLE 2- MEAN AND STANDARD DEVIATION

	mean		Standard deviation
Attitude toward entrepreneurship	4.23		1.10
Self- efficacy belief	5.02		0.99
Social norms		4.70	0.85

The results listed in Table 2, indicate that the mean of under studied variables in students of agricultural college of Razi university was calculated higher than average. But believe to self-efficacy (mean= 5.02) among other variables, allocated the highest degree.

According to obtained results, between entrepreneurship intention with attitude to entrepreneurship, society norms and believe to self-efficacy, there is a positive and significant relation. It means that, whatever one's attitude towards entrepreneurship was more favorable and more positive, *e in accordance and person' parallal with entrepreneurship activities andsocial norms b*s self-efficacy be higher , he is more decisive and more interested in do an enterprising activities.

DISCUSSION AND CONCLUSION

Findings indicate that, there is no significant relationship between gender and entrepreneurship intention that is in accordance and parallel with findings of Raeesi et al. (2008), Akbarsadat (1997), Rajabi et al. (2009) and Jahangiri and Kalantari (2008). While results of Abarguei and Bitaraf Sani (2009), Hosseini and Azizi(2008), Zarifian et.al (2009) and Qavami and Lotfalipour's studies (2009) are in contrast to this result.

The second finding of this study indicates that, there isn't significant relation between educational field of students and entrepreneurship intention. This result is confirmed by the findings of Alibaigy et al. (1387), Saljooghi (2009), Alibaigy (2009) and Zarifian et al. (2009), while it is in contrast with result of Rajabi et al. (2009) study.

Self-efficacy is one of the most important factors in entrepreneurship intention that in this research, it's role and importance has been studied. Obtained results express positive and significant relation between self-efficacy and entrepreneurship intention, findings of Boyd and Vozikis (1994), Lent et al. (2002), also confirms this.

Social norms are one of the other factors that in this research was considered to measure entrepreneurship intention **and** it's effect is confirmed. This finding is in accordance with results of Barani et al. (2009), Degeorge and Fayolle (2005) and Moriano et al (2006). While Linan's investigation (2005), indicates the opposite of this.

Another factor that based on current study has positive effect on entrepreneurship is person's attitude. Studies of Drnovsek and Erikson (2005) and Barani et al. (2009), is in agreement with expressed result.

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THE IMPACT OF OVERCROWDED CLASSROOM ON THE ACADEMIC PERFORMANCE OF THE STUDENTS AT SECONDARY LEVEL

JEHANGIR SHAH
RESEARCH SCHOLAR
INSTITUTE OF EDUCATION AND RESEARCH
UNIVERSITY OF PESHAWAR
PAKISTAN

DR. HAFIZ MUHAMMAD INAMULLAH
ASST. PROFESSOR
INSTITUTE OF EDUCATION AND RESEARCH
UNIVERSITY OF PESHAWAR
PAKISTAN

ABSTRACT

The purpose of this study was to investigate the impact of overcrowded classrooms on the academic performance of the students at secondary level. How can the efficiency of the teachers and their morale can be affected in overcrowded classrooms? How student can physiologically, sociologically and psychologically deprived in heavy classes? And what is the relation between students and teachers in overcrowded classroom? These were such questions that motivated the researcher to carry out a thorough investigation into the problems. The study was descriptive in nature. Thus the collected data was arranged, tabulated and presented in percentages. For this purpose statistical methods are used to draw conclusions. Basically five aspects namely, loss of teachers efficiency, physical conditions of classrooms, students physiological, sociological and psychological problems were evaluated through the help of questionnaires, interviews and from the analysis of past result of grade 10th. This study revealed how and to what extent over crowded classrooms can effect students' academic achievement and how teachers can actively utilize and manipulate the physical classroom-learning environment as part of their instructional design. Overcrowding can have a direct impact on learning. Teachers like to teach small classes (in size) because they are easier to handle. This study will be very fruitful in the best interest of the students, teachers, administrators and government to think over the problem and do something positive for the improvement of the education in Pakistan. At the end of the research conclusion was drawn for the improvement of overcrowded classrooms.

KEYWORDS
overcrowded classrooms, academic performance.

INTRODUCTION

School is a place where the teacher and the taught are living in close proximity. The teacher and the taught are living under the umbrella of teaching learning process. It is a place where an individual gets formal education. The more this umbrella provides facilities the more genuine learning will be taken place. In this regard school building is of the prime importance. School is a place where we can expect to produce good citizens, where students can have the idea about their culture, tradition, values and ideas.

In school, classroom is performing its role in the form of a unit of teaching learning process. It is a place where many students group together in a room for some special purpose. The dictionary of education tells that classroom is the name of a body where some students have been gathered for the purpose of collective instruction. Classroom is a place where students from different stratum of society come in close contact with one another. Here individual as well as group studies are taken place.

Well organized classroom is the sign of the best learning activities. Classroom will be managed in terms of various aspects. Students' performance will be judged on one hand discipline of the classroom may also not be spoiled. Classroom management means to increase attendance, to provide fun way teaching, to motivate the students and to reduce problem behavior. That classroom is considered well disciplined in which students are physically and mentally involved and feel at ease.

The classroom size should be 22-25 feet's so that the teacher voice may reach to each student easily. It should be wide by 20 feet. The recommended strength is 35 but the classroom may accommodate 40. (Education cod 1935)

It has been observed that lightening, temperature and the proper flow of air would have some effect on the teaching learning environment, McGuffey (1982). Cleanliness of the classroom also affects the attitude of the learners, Lackney (1996). Lack of space has a great impact on teaching learning process, Weinstein (1981).

According to the Education cod of K.P.K. (1935) paragraph 30, each student may be provided with separate seat and desk. Each student should be provided with enough space. The seats should be arranged in such a way that the teacher may move very easily between the rows. Each seat may have a reasonable space so that students may move or stand easily.

Noisy environment results in poor listening as the quieter environment provide good listening. Noisy environment affects reading ability and also affects the teacher instruction, (McGuffy, 1982).

FACTOR RESPONSIBLE FOR THE OVERCROWDED CLASSROOMS

Increase in population is the major cause of overcrowded classrooms. The size of class has become the topic of heated controversy these days (Taylor & Francis, 1994). Student's population in secondary education is unprecedented these days. This increase will remain continue in the coming time as well. This is alarming situation and everybody is worried about it. Students and teachers are the most sufferer and most of the students are failing to inter the school four walls. It results in overcrowded classroom filled with the students belonging to multicultural and multi social backgrounds.

Today secondary education needs reform to reduce burden over the teachers and to pull out the students from the boring situation. Overburden classrooms are one of the alarming factors in the low literacy rate of our country. Over crowded classrooms can cause many problems like the following;

I.   PHYSIOLOGICAL PROBLEMS

In overcrowded classrooms there is easy position to catch respiratory diseases, and other infectious illnesses. Over-crowded environment reduces the quality of air the individual's breathe by limiting the availability of oxygen, which adversely affects the health of individuals.

Temperature and light are also influential factors of the environment. Temperature tends to influence social behaviors such as aggression, while light, especially natural light, has been shown to enhance the performance of secondary level students.

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II.   PSYCHOLOGICAL AND SOCIOLOGICAL PROBLEMS

The purpose of education is to inculcate desirable habits, to prepare an individual to become good citizen, to prepare for vocation, to teach to use time wisely and to build moral character of students. In this way, the educational need of pupils will be satisfied. Since school has accepted these responsibilities. The school has to improve:

- Their personal development.
- Their social development.

METHODOLOGY

The study was descriptive in nature. For the collection of data points likert questionnaire was used. The data was collected, tabulated and analyzed to achieve the objectives of the study. It was an attempt to answer the question what is the link between class size and educational attainment.

POPULATION AND SAMPLING

Students and teachers of the government schools were the over all population of the study. A total of 200 students from Government High School Shaheen Town, Government High School Sufaid Dheri, Government High School Tehkal Bala, Government High School Agriculture University, Government High School for Girls Agriculture University, Government High School Palosi and Government High School Hayat Abad were selected as random sampling. 20 students and 5 teachers from each school were selected from class 10th.

INSTRUMENTATION

The investigator designed a five point's likert questionnaire to get students' perception about the overcrowded classroom. The questionnaire consisted of 39 items. These items were arranged properly to investigate the impact of overcrowded classroom on the academic performance of the students at secondary level in Khyber Pakhtunkhawa.

DATA COLLECTION

Questionnaire Method (Farooq, 2001) was followed for the collection of data. The researcher is teaching in Islamia Collegiate School since long so, he administered the questionnaire personally and some with the help of the students. Some of the random sampling population (the students) was instructed by the investigator personally. To facilitate the students, the questionnaire was translated in the native language of the students along with interpretation for the students.

TABLE NO 1: THE OPINION OF THE RESPONDENT ABOUT 40 STUDENTS IN A CLASS

Nature of responses	SA	A	DA	SDA	UD	Total
No of respondents	70	30	--	--	--	100
%	140	60	--	--	--	200

TABLE NO 2: THE IDEA OF THE RESPONDENTS ABOUT GOOD LIGHTENING

Nature of responses	SA	A	DA	SDA	UD	Total
No of respondents	03	11	48	24	--	100
%	12	44	96	48	--	200

TABLE NO 3: THE NO OF THE RESPONDENTS WHO ARE SATISFIED WITH EASY MOVEMENT OF THE TEACHER IN CROWDED CLASSROOM

Nature of responses	SA	A	DA	SDA	UD	Total
No of respondents	12	22	16	50	--	100
%	24	44	32	100	--	200

TABLE NO 4: IN OVERCROWDED CLASSROOM STUDENTS ARE NOT ABLE TO PARTICIPATE

Nature of responses	SA	A	DA	SDA	UD	Total
No of respondents	30	44	24	02	--	100
%	60	88	48	04	--	200

TABLE NO 5: DIFFERENT TYPES OF DISEASES CAN SPREAD IN OVER CROWDED CLASSROOMS

Nature of responses	SA	A	DA	SDA	UD	Total
No of respondents	30	50	02	16	--	100
%	60	100	04	32	--	200

It is very obvious from the above tables that 100% of the students recommended for 40 students in a class. Most of the students and teachers are not satisfied with the lighting system in overcrowded classrooms. Large number of the teachers and students are of the view that teachers cannot move easily in over crowded classrooms.

DATA ANALYSIS

The data was collected from the students sample in December 2011.The collected data was tabulated, analyzed and interpreted by using simple % method due to the nature of the data and time constraints.

DISCUSSION

For decades studies have shown that there is an explicit relationship between the physical facilities and the students' academic performance. It has found through different researches that students' academic performance is greatly affected by the physical characteristics of classroom. According to Earthman, G 2004:18, School building in which students pass considerable time has great influence upon students' academic performance. Better classroom arrangement has direct influence on the effectiveness of the teachers in their daily life. (Siegel, J 1999)

A survey was conducted by the SDPI (Sustainable development policy institute) 1998. The survey declared that overcrowded classroom is the major factor responsible for academic failure in Pakistan.

A research was conducted on the impact of physical facilities (including seating, density, noise, privacy, air quality, windowless classrooms, playground light etc.) on the students attainment, engagement and attendance (keep, G 2002; Higgins et al 2005; Lackney and Jacobs, 2004;gump, 1987; McGuffey 1982; Earthman 2004; Sundstrom, 1987; McNamara and Waugh 1993; and Weinstein 1979)

Temperature, light, heat and air quality are very important for the students' achievement (Earthman, 2004)

Most experts agree that in small class teachers have more opportunities for individualized interaction with students. In small learning groups the morale of a teacher also tends to be higher. They have more opportunities for in-depth teaching of basic content. They can collect materials to engage students in authentic learning experiences. Small classes reduce the effects of large schools on both the teachers and students;

- In crowded classrooms fewer students perform well;
- In contrast students get more benefits in small classes; especially minority group is the most benefiting.
- Students are paid individual attention in small sized class.

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- There is friendly and congenial atmosphere in small classes.
- Discipline problems are reduced to the maximum.
- In small classes individual attention is paid and students are more actively involved in different activities. (Charles.M Achilles, 1996)

Generally it has been observed that in small class, during instruction, teachers devote more time to instruction and have to spend less time on classroom management and discipline. They complete basic instruction more quickly as students participate more and spend more time on task. They have a better understanding on teaching materials, more organization and more forms of creative instruction.

Within the curriculum, teachers find that learning could take no more variety, breadth, depth and richness. They have more time for covering additional materials and use more supplementary texts and enrichment activities. While assessing, teachers can use meaningful assessment tools and can spend less time on paperwork and grading. Whereas overcrowded classrooms can lead to assignments, which are not checked as quickly or carefully, thus stopping the benefit of feedback. (Sharpson, 1980)

Researchers have found that both personal and academic self-regard is more positive in smaller schools. Evidence of increases in social bonding to teachers and school, self-esteem, academic self-concept, suggests that [small alternative] programs can respond constructively to student's underlying needs (Nicholas Hans, 1998).

According to the report of commission on National Education, our own secondary school system is, remote from our actual and immediate needs that it has been rendered.. The commission is of the opinion that secondary school system must bring about the full development of the child as an individual, citizen and a patriot.

Students in small high schools have a greater "sense of belonging" to the group than students in larger schools. All of these things combined can make even a good student reluctant to come to class. The students neither take interest in the class, nor he want to become social or to take part in social activities.

"The smaller the class size the greater the effect in instructional process on pupil effect and on achievement" (Glass et al. 1982)

CONCLUSION

Student in smaller classes develop more positive attitudes, perceptions and human relationships. They can function more effectively as members and leaders of groups; also can learn basic skills and subject matter better, more easily and faster. They can think more creatively and divergently and can achieve higher attention and lower absence rates.

In small classes students are in more close relation, they develop better understanding and associate themselves with their classmates as well as with their teachers. (Boyesen M. and Edvin B. (1999)

Teachers and students must have sufficient classroom space and access to materials and services. Students and teachers feel overwhelmed, discouraged and often disgusted with the space shortage. Teachers do not have as much time per pupil for individual instruction and assistance.

Crowded classroom conditions not only make it difficult for students to concentrate on their lessons, but inevitably limit the amount of time teachers can spend on innovative teaching methods such as cooperative learning and group work leaving teachers stressed and overworked.

On the contrary in a smaller class, teacher experiences a greater sense of personal satisfaction. They feel great sense of achievement and deal more individually with misbehavior problems and diagnose causes before major problems occur.

Larger classes can also be the center of more behavioral problems, which distract from the learning environment. Students and teachers in overcrowded classes agreed that overcrowding negatively affected both classroom activities and instructional techniques. Students learn at different rates and in different ways. In a large class teachers couldn't spare the time which students may need for extra help.

Overall, both students and teachers have better attitudes toward smaller classes. The atmosphere is one of less anxiety and tension. Students of smaller classrooms have found a climate of warmth, reduced levels of frustration, and positive attitudes toward teaching and learning (Blatchford, 1980).

No system of education is worth the name, which ignores the experiences and values prevailing outside the school. In studying system of education we should forget that things outsides the school matter even more. Things inside the school are govern and interpret the things outside.

Human life is very complex. If a person is ignorant about himself/herself, his/her abilities, aptitudes and interests, would not be able to serve. Life in the twenty-one century means survival of the fittest. Those who can keep pace the world will lie and those who cannot perish. To live a desirable life every person requires to know what abilities and interests are and what is going on around.

It is thus the task of the school to give students much information and provide them useful life experiences. It has been observed that if normal children are kept in crowded conditions, it can cause behavior disruption, conflict, punishment, diseases, lack one-to-one learning, less advantage, and sub standard academic achievement

1. Poor academic performance.
2. Poor health of the students.
3. Drop out of the students.
4. Moral corruption.
5. Social derivation.
6. No effective teaching.
7. Stressful life of the teachers
8. Discipline problems

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MICROFINANCE EFFICIENCY AND FINANCIAL SUSTAINABILITY: EVIDENCE FROM RURAL MFIs IN TANZANIA

GANKA DANIEL NYAMSOGORO
SR. LECTURER
SCHOOL OF BUSINESS
MZUMBE UNIVERSITY
MZUMBE

ABSTRACT

Efficiency and sustainability are closely related. While the relationship between efficiency and financial sustainability of microfinance institutions is well documented, there is but few (if any) systematic study which focuses specifically on how microfinance institutions' efficiency affects their financial sustainability. This paper uses panel data analysis to determine, which among the efficiency indicators have significant relationship with financial sustainability. Using four-year survey data obtained from 98 rural microfinance institutions in Tanzania the paper provides empirical evidence that yield on gross loan portfolio, the level of portfolio at risk, liquidity level, staff productivity, and operating efficiency significantly affect the financial sustainability of rural microfinance institutions. Moreover, selling high volume loans alone does not improve financial sustainability. The findings in this paper suggest that, for sustainability, MFIs should strive to operate at relatively low costs while keeping the staff productivity and repayment rates higher.

KEYWORDS

Efficiency, Financial sustainability, Microfinance, Panel data, Tanzania.

INTRODUCTION

Microfinance is the provision of small-scale financial services to the unbanked poor. Growth of microfinance institutions (MFIs) has been associated with their efficiency (Gonzalez 2007). It has been reported that efficiency helps microfinance institutions to attain financial sustainability (Thapa et al. 1992) and therefore the desire for financial sustainability has been viewed as a locus of incentive for efficiency (Gonzalez-Vega 1998:5).

While the relationship between efficiency and financial sustainability is well documented (Cull, Demirgüç–Kunt and Morduch 2007; Gonzalez 2007; Woller and Schreiner 2002; Gonzalez-Vega 1998; Thapa et al. 1992) reviewing microfinance literature that we have to-date one would say there is but few (if any) systematic study which focuses specifically on how microfinance institutions' efficiency affects their financial sustainability. Few studies that we know have indicated the relationship between efficiency and financial sustainability by looking at various cost and revenue elements (Christen et al. 1995; Rosenberg 1996; Christen 2000; Woller 2000; and Cull et al. 2007). Some studies have also used the personnel productivity measures of efficiency as part of their analysis (Christen et al. 1995; Woller and Schreiner 2002). Other studies have linked microfinance efficiency with commercialization (Richardson and Lennon 2001; Christen and Drake 2002; Woller 2002; Hishigsuren 2007) and still some relate it with microfinance best practice (CGAP 1996; Gonzalez-Vega 1998; Woller, Dunford and Warner 1999; and Woller 2000).

This paper attempts to provide empirical evidence on how microfinance efficiency influences financial sustainability, by exploring small-size MFIs in rural Tanzania. The remaining sections of this paper are structured as follows: the next section (Section 2) provides a theoretical background. Section 3 is methodology followed by results (Section 4). The last section is conclusion.

THEORETICAL BACKGROUND

Efficiency refers to the ability to produce maximum output at a given level of input (Chua and Llanto 1996). It is measured in terms of how an organization has managed to reduce costs at the same level of revenue or increase revenue at the same level of costs or both. Cost reduction however, is often seen as a more difficult exercise than revenue improving. As Gonzalez-Vega (1998) has argued, many microfinance institutions are inefficient because they think in terms of levels of speed of collections, not in terms of operational costs. His argument is based on the fact that for profitability and therefore sustainability cost reduction is as important as increasing revenue.

Financial sustainability of a microfinance institution refers to its ability to cover its operating expenses from its own operations. It is a situation where microfinance income is higher than microfinance expenses, also known as profitability. Thus, profitability has been used as an indicator of financial sustainability (Von Pischke 1996; CGAP 2003; Woller and Schreiner 2002; Adongo and Stork 2006; Armendáriz and Morduch 2007; Cull et al. 2007; and Gonzalez 2007). This is based on the assumption that an MFI is and will continue to be a going concern (Woller et al. 1999). Profitability has also been viewed as a stepping-stone to financial sustainability (Schreiner 2000).

The expenditure (costs) and income (revenue) of the microfinance institutions can be affected by either internal factors or external factors or both. The level of the impact that these factors cause on profitability may vary from one factor to another regardless of whether they are internal or external factors. The internal factors are those internal to the MFI and, therefore, are controllable within the MFI. These include: the number of staff, amount of loan disbursed, and the volume of costs and revenue of the MFIs. Anything that management of an MFI does to influence these factors will have an impact on the overall profitability of an MFI. There are also other factors that may drive the level of income or expenditure of microfinance institutions, which are not controllable within the microfinance institutions. We call them external factors. Examples of the external factors are where the government through its regulating body sets interest rate caps beyond which MFIs are not allowed to charge the interest rates; and where the government has set high wages and salaries level that some small MFIs may not afford employing a qualified personnel without significantly affecting its overall operating expenses and, therefore, its sustainability. In this paper, efficiency refers to internal factor. That is factors controllable by the organization's management.

Efficiency of microfinance institutions in managing their liabilities and assets, including loan portfolio, and efficient utilization of human resources, that is, loan officers and other staff in general will lead into increased income and reduced expenditure. The increased income and reduced expenditure will improve the profitability, which transforms to financial sustainability.

The measures of efficiency of microfinance institutions can be categorized into three: assets and liabilities management; portfolio quality; and human resource productivity. They capture how efficient the microfinance institutions are in utilizing their assets (both monetary valued assets, including loan portfolio, and human resource or MFI staff) and the MFI's liabilities. The results from the efficient utilization of assets and management of liabilities lead an MFI to increase income at a given level of operation and reduce expenditure at the same level. This paper defines these measures following the 2003 Microfinance Consensus Guidelines issued by the Consultative Group to Assist the poor (CGAP).

ASSET AND LIABILITY MANAGEMENT MEASURES

The assets and liability management measures indicate how well the microfinance institutions' management manage liabilities, and how they manage the assets to generate income towards financial sustainability. Current assets are the working capital for the microfinance institutions. They make a higher proportion of the total assets of the microfinance institutions. The current assets of an MFI are made up of cash, loans to clients or members, and other short-term investment. The liabilities are made up of trade creditors, short-term loans, and other creditors. The key measures under the assets and liabilities management that were considered in this paper are: the yield on gross loan portfolio; current ratio and yield gap.

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(a)   Yield on Gross Loan Portfolio

The yield on gross loan portfolio indicates the ability of an MFI to utilize the short-term assets to generate cash financial revenue. The cash revenue could be from interest on loan, fees, penalties, and commissions. According to CGAP (2003), the yield on gross loan portfolio does not include any unpaid revenue. That is, even if the revenue has accrued, it is not included in this computation as long as it has not yet been received in cash by the MFI. This is because, part of MFIs' accrued interest revenue never get received as the borrowers default.

The yield on gross loan portfolio measure is a ratio of cash financial revenue from loan portfolio to average gross loan portfolio. The higher the ratio the better the MFI is, indicating the efficiency with which the MFI has utilized its resources in generating cash revenue.

(b)   Current Ratio

An MFI's current ratio is a ratio of its current assets to current liabilities. The current ratio indicates the dollar value of current assets, also known as short-term assets, available to meet each one dollar short-term obligation, also known as short-term liabilities or current liabilities (Brealey, Myers and Allen 2006). Thus, it is called liquidity ratio. It measures the efficiency with which an MFI matches its assets and liabilities (Collier 2006, Barrow 2006).

PORTFOLIO QUALITY MEASURES

The portfolio quality measures are generally a part of asset management measures with specific emphasis on how management makes and manages the loan portfolio. That is, among others, how they select customers to minimize the effects of adverse selection, and how they make repayment follow-ups to enhance higher repayment rates, and, therefore, reduce the effects of ex-post and ex-ante moral hazards. The adverse selection refers to a situation where lender may make wrong risk estimation about the borrower and thus, ends up selecting a risky borrower (Ghatak 1999; Hermes and Lensink 2007).

Armendáriz and Morduch (2007) define ex-ante moral hazard as the action taken by the borrower after loan disbursement but before realization on project returns, which may affect the probability of getting good return. While the ex-ante moral hazard occurs after the loan disbursement but before realization of project returns, the ex-post moral hazard, as the name suggests, occurs after realizing the project returns. In this case, the borrower may claim that his or her project was not successful, and thus, ask for extension or not turn up to repay the loan (Armendáriz and Morduch 2000, 2007. The effects of both ex-post and ex-ante moral hazards are reflected in the quality of an MFI's portfolio.

The longer the loan remains unpaid, the higher the risk that the same will not be repaid, thus, known as loan at risk or portfolio at risk (PAR). The PAR indicates the amount of loan with one or more past due repayment installments by certain number of days. According to CGAP (2003), the portfolio at risk is probably the most acceptable measure of portfolio quality. Current microfinance literature indicates that, interest from loan is the main source of income to microfinance institutions (Tellis and Seymour 2002; Fernando 2006). The amount of interest income to be received from loans will depend on the quality of loan portfolio. The quality of a loan portfolio indicates, among other things, the loan principal and interest repayment performance (Godquin 2004). It is, therefore imperative that, the management of a loan portfolio should be one of the key daily tasks of an MFI's management.

The portfolio at risk measure is given by the value of the portfolio at risk, at a given number of days, divided by gross loan portfolio. The higher portfolio at risk will indicate poor collection policy, and or that an MFI is not efficient in making collection. Sometimes the poor collection is an indication of adverse selection and or moral hazards (Armendáriz and Morduch 2007).

PRODUCTIVITY MEASURES

The productivity measures indicate how well an MFI utilizes its assets and staff in general, and loan officers in particular in influencing loan repayment, enhancing increase in income, and reduction in overall microfinance expenditure. According to CGAP (2003), the productivity measures indicate how efficient an MFI is in using its resources. Efficiency of microfinance staff has a role to play in bringing about profitability and, therefore, sustainability of microfinance institutions. The commonly used productivity measures are: loan officer productivity; personnel productivity; average disbursed loan size; operating expenses ratio and cost per borrower or client.

(a)   Loan Officer Productivity

Loan officers of an MFI are regularly involved directly in revenue generating activities of microfinance institutions. Duties of the loan officers vary from one microfinance institution to the other. However, to most microfinance institutions, loan offices are the ones involved with finding, screening and selecting clients, and when a loan is granted, making follow-ups for loan repayment. Their efficiency in this task then deserves to be measured.

The loan officer productivity measure is computed by dividing the number of active borrowers by the number of loan officers (CGAP 2003). The loan officer productivity measure indicates that, all things held constant, the larger the number of clients served by a loan officer, the efficient is the microfinance in utilizing loan officers. However, the efficiency in utilizing loan officers needs to be compared to what the large number of borrowers means to the overall revenue of an MFI.

(b)   Personnel Productivity

Apart from using loan officer's productivity measure alone, some microfinance institutions compute the productivity ratio based on total number of personnel. This is because some of the duties of loan officers and that of other microfinance staff tend to overlap. According to CGAP (2003), the personnel productivity ratio measures how efficient an MFI is in utilizing its total human resources in managing its clients and thereby contributing to income for the microfinance institution.

The personnel productivity ratio is computed by dividing either number of active borrowers or number of active clients as numerator, by the number of personnel as denominator. When personnel productivity ratio is used, according to the Microfinance Consensus Guideline issued by CGAP (2003), most MFIs use the number of clients as numerator. This is probably because some of the staff may not be directly involved with borrowers; they may rather be involved with savers or clients for other services. Again, all things held constant, the higher the number of clients per staff would indicate microfinance efficiency in utilizing its staff.

(c)   Average Disbursed Loan Size

Although microfinance institutions have various products, the loan product is the most common one to most of them. The more loans are disbursed, all things being equal, the better the microfinance business or services. The average disbursed loan size measures the average loan size that is disbursed to clients (CGAP 2003). It measures the efficiency of microfinance institutions in selling loans. The average disbursed loan size is computed by dividing the value of loans disbursed in a period by total number of loans disbursed during the same period. All things being equal, the large the size of average disbursed loan, the efficient the MFI in selling loans.

(d)   Operating Expenses Ratio

According to CGAP (2003), the operating expenses ratio is the most commonly used measure of microfinance efficiency. It measures how an MFI's management has been efficient in reducing costs of operation at a given level of operation. The level of operation is measured by the average gross loan portfolio. The lower the operating expenses ratio will indicate efficiency in microfinance institutions' cost reduction strategy. That is, an MFI is operating at lower cost, which means, all things being equal, efficiency.

The operating expenses ratio is computed by dividing operating expenses by average gross loan portfolio. The operating expenses include all administrative and staff expenses. CGAP (2003) suggests the average total assets to be an appropriate denominator for microfinance institutions which have other products other than loan. This is because, when an average gross loan portfolio is used as denominator, comparative between loan-only MFIs and MFIs with other products like savings and deposits becomes biased and unfavorable.

(e)   Cost Per Borrower and Cost per Client Ratios

Cost reduction is one of the efficiency parameter of an MFI. The cost per borrower and the cost per client ratio measure the efficiency of microfinance institutions in serving their client. They determine the average cost of maintaining a borrower or a client. The lower the cost per borrower or client will indicate the microfinance efficiency. This will also mean higher profitability and, therefore, financial sustainability. Cost per borrower ratio is computed by dividing operating expenses by average number of borrowers (CGAP 2003). Again, when an MFI has other non loan products, the appropriate denominator is the average number of clients. This indicates the cost per client as a measure of how much it costs an MFI to maintain a client.

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THE DATA AND DESCRIPTIVE STATISTICS

The data used for this study were collected from 98 rural MFI in Tanzania. Data covered four-year period from 2004 to 2007, gathered via questionnaires administered during fieldwork in 2008. The 98 MFIs included 95 cooperatives also known as member-based MFIs (MB-MFIs) and 3 nongovernmental organizations (NGO-MFIs). The 3 NGO-MFIs are those that had branches in rural areas. In total there were 21 branches from these 3 NGO-MFIs. The branches were autonomous. They also had different amount of loan disbursed, different number of clients, number of staff, and therefore different productivity. Bearing in mind these differences and the fact that the branches keep separate branch accounts we adopted NGO-MFI decomposition to capture these branch specific features that could affect the efficiency of microfinance. Thus with branch decomposition we had a total of 116 financial units (95 from MB-MFIs and 21 from NGO-MFIs) for data analysis purposes. Branch analysis is useful especially where an MFI has several branches and it has been used in previous studies to capture branch-specific features (Hartarska and Nadolnyak 2008). The four-year data from the 116 study units gave us a total 424 observation for the variables under study descriptive of which are in Table 1.

TABLE 1: DESCRIPTIVE STATISTICS

Variable	Observations	Mean	Std. Dev.	Min	Max
FSS	424	1.566226	0.8717998	0.16	7.39
yield	424	0.1624349	0.0922478	0	0.4173244
PAR	424	0.2670321	0.2190385	0.0012695	0.9674952
liqratio	424	7.960213	29.69224	0.7296336	326.696
borrpstaff	424	109.1185	152.2688	4.75	1026.5
stcospbor	424	13320.94	25140.72	0	372645
aepborr	423	7930.802	13069.06	7.807465	136851.8
costpclie	424	22363.52	39387.6	93.88715	418266.6
oeratio	424	0.2129245	0.2775142	0	2.35
avdisbloan	424	520164.1	673442.8	5200	3212295

Source: Authors' survey, 2008

The mean ratio of the financial sustainability measure (FSS) for the rural MFIs is 1.566 indicating profitable and, therefore, sustainable MFIs. In total we had 424 observations out of which 337 (79.5%) indicated sustainability and the remaining 87 observations (20.5%) the MFIs were not financially sustainable. From the 424 observations, 340 (80.2%) were member-based MFIs of which 265 (77.9%) were financially sustainable and 75 observations (22.1%) were not sustainable. The remaining 84 observations (19.8%) were the NGO-MFIs of which 72 observations (85.7%) were financially sustainable and only 10 observations (14.3%) were not sustainable. The above statistics tend to suggest that the MB-MFIs are less sustainable than the NGO-MFIs. However, the test for mean difference between the MB-MFI and the NGO-MFI's sustainability was not statistically significant leading us to conclude that the two are not statistically significantly different.

The mean yield on gross loan portfolio shows that rural MFIs in Tanzania generated 16.24 cents cash for each 1 shilling in the outstanding loan portfolio. The mean yield on gross portfolio for the MB-MFIs (340 observations) was 16.21 percent while for the NGO-MFIs (80 observations) was 16.37 percent. The test for mean difference indicated that the difference was not statistically significant.

The mean portfolio at risk (PAR) was 26.7 percent, with the highest PAR being 96.75 percent. The MB-MFIs had PAR of 27.24 percent while the NGO-MFIs had PAR of 24.4. Comparatively, the NGO-MFI appeared to have higher repayment rate (low PAR ratio) than MB-MFIs. However, the t-test statistic of mean difference indicated that the difference was not statistically significant.

The mean liquidity ratio was 7.9 indicating that, on average, the value of the current assets was 7.9 times the value of their short-term liabilities (obligations). Only in 14 observations (3.3%) out of 424 MFIs had liquidity ratio of less than 1. All things being equal, this is a good indication of good working capital (current assets) management. Again, for the MB-MFIs, the mean liquidity ratio was 7.55 times while for the NGO-MFIs was 9.61 times. The test for mean difference however, indicated no significant difference between the two.

Very high liquidity ratios could indicate idle short-term resources. However, given the nature of institutions, the microfinance institutions, sometimes it may be reasonable to have higher liquidity to meet any unplanned resource requirement. Moreover, as opposed to banks, that treat savings and deposits as short-term liabilities, for most MFIs, especially MB-MFIs the savings and deposits are considered as part of capital and, therefore, categorized as part of long-term liabilities and capital leading to higher liquidity ratio.

The mean number of borrowers per staff was 109. The minimum number of borrowers per staff was 5 while the maximum was 1026. A comparison of the mean difference for the MB-MFIs (109) and NGO-MFI (108) indicated insignificant difference. MB-MFIs had mean of 109 while NGO-MFIs had a mean of 108 borrowers per staff.

In this study we adopted the decomposition of cost per borrower to explain the contribution of efficiency in reducing each of the individual components of cost per borrower namely, administrative expenses and staff or personnel related expenses. The mean administrative cost per borrower for all MFIs was TShs. 7930 (equal to USD 6.08) while the maximum was TShs. 136,851 (USD 104.95). The MB-MFIs appeared to operate at relatively lower administrative costs (TShs. 5,373 or USD 4.12) than the NGO-MFIs (TShs. 18,254 or USD 14). The test for the mean difference was strongly statistically significant at 1 percent significance level.

The staff expenses measurement indicated higher deviations on staff costs per borrower among MFIs. The standard deviation was TShs. 25,140.72 (USD 19.28) while the mean was TShs. 13,320 (USD 10.2) and the maximum was TShs. 372,645 (USD 285.77). Once again, the t-test of the mean difference indicated that the difference between the mean for the MB-MFIs (TShs. 8,474.6) and NGO-MFIs (TShs. 32,937.08) was statistically significant indicating that the MB-MFIs operate at relatively lower costs per borrowers than their counterpart.

A total cost per client variable was included to measure the overall efficiency in cost reduction in serving one MFI client regardless as to whether the same is a borrower or a client for other of the MFI's products or services. The descriptive statistics for this variable indicated high deviations among MFIs. The mean cost per client was TShs. 22,363.52 (USD 17.15) while the minimum was TShs. 93.88 (USD 0.07) and maximum was TShs. 418,266.6 (USD 320.75). For the MB-MFIs, the mean cost per client was TShs. 8,214.15 (USD 6.3) while for the NGO-MFIs it was TShs. 79,634.78 (USD 61.06). The t-test for the mean differences among these types of MFIs for this variable was statistically significant.

The MFIs operated at mean operating expenses ratio of 21.29 percent of their outstanding portfolio. The mean ratio for the MB-MFIs was 16.92 percent while for the NGO-MFIs was 39 percent. The test statistic for the mean difference for this variable indicated that the NGO-MFIs operate at relatively higher costs than their counterpart.

The average disbursed loan size was TShs. 520,164.1 (USD 398.9). Compared with the mean average outstanding loan size of TShs. 210,096.5 (USD 161.12) this shows that, all things being equal, around 60 percent of the loans disbursed were paid back within the same year. Only 40 percent remained outstanding, out of which, according to the portfolio at risk statistics in Table 1, 26.7 percent of total outstanding portfolio (or 66 percent of the amount that remain unpaid in the year when the loan was disbursed) are at risk. Moreover, 63 percent of the amounts disbursed were repaid within the same year for the MB-MFIs while only 48 percent was repaid within the same year for the NGO-MFIs. Statistics for the portfolio at risk shows that of the unpaid amount within the same year 74 percent became at risk for the MB-MFIs while for the NGO-MFI is 47 percent. While the mean differences for average outstanding loan size was statistically significant, the difference for portfolio at risk was not significant. The analysis in this section considered a one-year maximum loan duration allowed by the MFIs studied.

Generally, the data suggest that while the MB-MFIs and NGO-MFIs were performing equally on income and productivity related variables, the MB-MFIs performed better in cost related variables. That is, the MB-MFIs operated at relatively lower costs than their counterpart.

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EMPIRICAL MODEL

This study used random effect (RE) panel regression model for data analysis. The suitability of the RE was tested using the standard Hausman test in which the RE was compared with the fixed effect (FE) model. The test for multicollinearity was done using the variance inflation factor (VIF) and found no multicollinearity problem. The highest VIF was 3.43, and the mean was 1.93. The following regression model was estimated:

$FSS_{it} = \alpha_i + \beta_1 \, yield_{it} + \beta_2 \, PAR_{it} + \beta_3 \, lnliqratio_{it} + \beta_4 \, lnborrpstaff_{it} + \beta_5 \, lnstcospbor_{it} + \beta_6 \, lnaepborr_{it} + \beta_7 \, lncostpclie_{it} + \beta_8 \, lnoeratio_{it} + \beta_9 \, lnavdisbloan_{it} + \varepsilon_{it}$

Where: FSS is the financial self-sufficiency, which is the dependent variable; α_i is a constant term; β_{is} measure the partial effect of independent or explanatory variables in period t for the unit i (*MFI*); the X_{it} are the explanatory variables as indicated in Table 2; and ε_i is the error term. The variables, both dependent and independent, are for cross-section unit i at time t, where i = MFIs (1 to n), and t = 1 to 4.

TABLE 2: INDEPENDENT VARIABLES

S/N	Variable standard name	Variable name as used in regression model	Variable description as used in regression model	Expected Effect on FSS
1.	Yield (yield on Gross Loan Portfolio)	yield	Yield on gross loan portfolio	+
2.	Portfolio at Risk (PAR)	PAR	Portfolio at risk	(-)
3.	Liquidity ratio (Current Ratio)	lnliqratio	Natural log of liquidity ratio	(+/-)
4.	Number of borrowers per staff	lnborrpstaff	Natural log of number of borrowers per staff	(+/-)
5.	Administrative expenses per borrowers	lnaepborr	Natural log of administrative expenses per borrower	(-)
6.	Staff costs per borrower	lnstcospbor	Natural log of staff cost per borrower	(-)
7.	Cost Per client	lncostpclie	Natural log of cost per client	(-)
8.	Operating Expenses Ratio	lnoeratio	Natural log of operating expenses ratio	(-)
9.	Average disbursed loan size	Lnavdisbloan	Natural log of the average disbursed loan size	(+)

The Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was applied and found that there was heteroskedasticity. To remedy it we estimated the model using heteroskedasticity robust standard errors. The dependent variable (*FSS*) is given by:

$FSS = \quad AFR / (OE + FE + LLPE + EA)$

Where: AFR is adjusted financial revenue; OE is operating expenses; FE is financial expenses; LLPE is loan loss provision expenses; and EA is expense adjustment. The expense adjustments made were to deduct the amortized amount of subsidies as adopted by MFIs surveyed. The adjustments are meant to indicate whether or not the microfinance institutions are able to cover their costs without any subsidization also assuming that the capital is raised at commercial rates (CGAP 2003, Balkenhol 2007). The effects of taking off the subsidies however were very small due to the fact that most of MFIs surveyed did not have substantial amount of subsidies during the study period. Moreover, the concessional loan amounts were also not substantial making the effect of cost of capital adjustment not to be felt.

The independent variables as used in the regression model are described in Table 2. Log transformation was adopted for some variables to smooth the differences among these variables for model fitting purposes. Natural logarithms of the variables were used as indicated in Table 2.

ECONOMETRIC RESULTS

The econometric results indicate that the overall Wald statistic is statistically significant at 1 percent significance level leading us to reject the hypothesis that all coefficients are equal to zero. Summary of econometric results on how the microfinance efficiency parameters affect the financial sustainability are presented in Table 3.

TABLE 3: SUMMARY OF ECONOMETRIC RESULTS

Variable	Coefficient	Robust SE	P>z
yield	4.869958	0.7170055	0.000***
PAR	-0.46002	0.1573824	0.003***
lnliqratio	0.1710332	0.0661661	0.010**
lnborrpstaff	-0.145104	0.0389201	0.000***
lnaepborr	0.019158	0.029039	0.509
lnstcospbor	-0.0355257	0.0651731	0.586
lncostpclie	-0.1167503	0.0615061	0.058*
lnoeratio	-0.6179029	0.0756633	0.000***
lnavdisbloan	0.0082543	0.036585	0.821

Source: Authors' survey, 2008

The yield on gross outstanding loan portfolio *(yield)* indicates the efficiency of microfinance institutions in generating cash revenue from their outstanding portfolios. The higher yield on gross outstanding loan portfolio ratio, other things being equal, indicates efficiency. The econometric results in Table 3 show strong positive relationship between *yield* and financial sustainability of the microfinance institutions. This provides evidence that the efficiency of microfinance institutions in generating cash revenue will positively affect their financial sustainability.

The portfolio at risk (*PAR*) measure indicates how efficient an MFI is in making collections. The higher the *PAR* implies low repayment rates, an indication of inefficient MFI. The higher the *PAR*, the more inefficient the MFI will be and, therefore, the less financially sustainable. The econometric results indicate a negative relationship between *PAR* and financial sustainability. This shows that, the less efficient the MFI is (higher *PAR*) the less will be its financial sustainability. The coefficient for the *PAR* variable was statistically significant at 1 percent level of significance.

Apart from being able to influence higher repayment rates, microfinance institutions should also have enough resources (working capital) to meet their outstanding short-term obligations including disbursing loans and repay clients' savings and deposits. The ability to pay short-term obligations when they fall due is determined by the liquidity ratio *(lnliqratio)*. All things being equal, the higher the liquidity ratio the better, an indication of microfinance efficiency. The econometric result in Table 3 confirms this. The coefficient for the liquidity ratio variable is positive and statistically significant at 5 percent significance level. This indicates that, the MFIs' liquidity level affects their financial sustainability, and that holding all factors constant, the higher the liquidity the more financially sustainable MFI will be.

The number of borrowers per staff *(lnborrpstaff)* variable measures the efficiency with which MFIs utilize their staff to serve and manage a certain number of borrowers. All things being equal, the higher the number of borrowers per staff means efficiency utilization of microfinance staff. However, the econometric result indicated that the number of borrowers per staff was negatively and strongly statistically significantly related to the financial sustainability. This shows that the increase in number of borrowers per staff affected negatively the financial sustainability of rural MFIs in Tanzania.

The negative relationship between staff productivity and financial sustainability in this study implies that the more numbers of borrowers is required to be served by a staff the less financially sustainable the microfinance will be. That is, microfinance staff for rural MFIs are not efficient as a result of their failing to manage the borrowers when the number grows causing the microfinance institutions to suffer poor repayment rates and, therefore, become less financially sustainable. Although contradicting the findings by Christen et al. (1995) that staff productivity is not associated with financial sustainability, the findings in this study are in line with the findings by Christen (2000) and Woller and Schreiner (2002). The findings in our study also confirm the findings by Gregoire and Tuya (2006) and Hermes, Lensink and Meesters (2008) that outreach and efficiency are negatively correlated.

Microfinance institutions are expected to operate at relatively low costs to be able to maximize their profit and become financially sustainable. The cost per borrower variable measures this. In this study we decompose the cost per borrower to gain more insight into the effect of each of the major individual

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components of the cost per borrower on financial sustainability. These are the administrative costs per borrower (also known as operating costs) and staff related costs per borrower. The lower the cost per borrower element, all things being equal, would indicate microfinance efficiency.

The coefficient for the administration expenses per borrower *(lnaepborr)* in Table 3 is positive but not significant even at 10 percent significance level. The positive coefficient of this variable indicates that the higher the amount spent in managing the portfolio, all things being equal, and the higher repayments will be. The higher repayments would lead to relatively higher profitability and, therefore, financial sustainability. This relationship although contradicting the accounting profitability theory that higher costs, all things being equal, reduce profitability, it helps to explain the nature of microfinance business. With microfinance institutions, the more you invest in customer monitoring, including field visits, the higher repayments will be. This finding should, however, be interpreted with caution. The focus here should be to spend more on managing the loan portfolio and less on other activities which may be less related to the main business. Moreover, although not statistically significant, the positive sign of the coefficient of this variable tends to contradict the findings by Christen (2000) and Woller and Schreiner (2002) that higher administrative expenses affect negatively the financial sustainability.

Another component of the cost per borrower considered in our study was the staff costs per borrower *(lnstcostpborr)*. The coefficient for this variable was negative but statistically insignificant. The insignificant effects of the staff costs per borrower on the financial sustainability is contrary to the findings by Christen et al. (1995) and Woller and Schreiner (2002), which show that salary levels significantly determine financial sustainability of microfinance institutions. The finding in our study also contradicts Cull et al. (2007), which shows that to achieve profitability MFIs should invest heavily in staff costs. The possible explanation for this deviation can be based on the nature of most MFIs studied, especially the MB-MFIs, where the staff-pay is not based on their efficiency, the possible case with Cull et al. (2007) findings. Thus, higher staff-pay, all things remaining constant, could lead them into more leisure than in doing more work for the MFIs' main business especially where facilitation for field visits is low. This can also help to explain why possibly the administrative expenses are positively related with financial sustainability.

Hartarska (2005) found that lower wages worsen microfinance depth of outreach. This implies that high wages relates to reaching poorer clients as indicated by smaller loans which have been associated with less profitability (Gonzalez 2007). Thus, the negative coefficient for the staff costs per borrower confirms that, if higher staff costs improves depth of outreach (lower loan size), which is associated with lower profitability, then the higher the staff costs per borrower, all things being equal, means less profitability and, therefore, less financial sustainability.

While we decomposed the cost per borrower to explain the effects of each cost component, we also used the overall cost per client *(lncostpclie)* variable to assess the effects of microfinance efficiency (measured by the overall cost reduction) on the financial sustainability. The results show that the efficiency in reducing overall costs positively affects the financial sustainability of rural MFIs in Tanzania. The coefficient for this variable was negative, statistically significant at 10 percent level, as expected indicating that higher cost reduction (low cost per client) improves financial sustainability.

On expenses related variables, we finally assessed the effects of the operating expenses ratio *(lnoeratio)* on the financial sustainability. The econometric result for this variable suggests that the operating expenses ratio strongly affect the financial sustainability of microfinance institutions. The coefficient for operating expenses ratio variable was negative and statistically significant at 1 percent significance level. This indicates that, the more MFIs are efficient in reducing the operating costs at a given level of outstanding loan portfolio the more profitable they become and, therefore, financially sustainable.

The last variable is average disbursed loan amount *(lnavdisbloan)*. The coefficient for this variable was positive but statistically insignificant even at 10 percent significance level. A possible explanation for this variable's coefficient sign is that, all things being equal, the higher the volume of loans sold would mean higher interest income which leads to higher profitability and, therefore, sustainability. However, without higher repayments, the higher volume of loans may not contribute positively to the financial sustainability of microfinance institutions. With rural MFIs in Tanzania, as revealed in the descriptive statistics in Table 3 above, the PAR is over 26 percent which translates into less than 74 percent repayment rates.

CONCLUSION

From the econometric results presented in this paper, we conclude that the following indicators of Microfinance institutions' efficiency have significant relationships with financial sustainability: the yield on gross loan portfolio; the level of portfolio at risk, the liquidity level; the number of borrowers per staff; and the operating efficiency. Moreover, selling higher volumes of loans alone does not improve financial sustainability. The same should be accompanied by effective follow-ups to ensure higher repayment rates. The findings in this paper provide evidence and support the microfinance theory that links efficiency to the financial sustainability. Thus, to become financially sustainable, MFIs should strive to operate at relatively low costs while keeping the staff productivity and repayment rates higher.

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EFFECTS OF MACROECONOMIC VARIABLES ON GROSS DOMESTIC PRODUCT IN BANGLADESH

MINA MAHBUB HOSSAIN
LECTURER
DEPARTMENT OF AGRICULTURAL STATISTICS
FACULTY OF AGRIBUSINESS MANAGEMENT
SHER-E-BANGLA AGRICULTURAL UNIVERSITY
SHER-E-BANGLA NAGOR

SAYEDUL ANAM
LECTURER
DEPARTMENT OF BUSINESS ADMINISTRATION
FACULTY OF BUSINESS AND ECONOMICS
DAFFODIL INTERNATIONAL UNIVERSITY
DHANMONDI

ABSTRACT

The Gross Domestic Product (GDP), chief indicator of an economy, shows that for a long time, Bangladesh economy was backward. The years after independence, the size of Real GDP, Per Capita GDP and their growth rates was small but improved from 1990.In this study the GDP of the 64 districts in Bangladesh at current market prices are considered. The factors which have effects on the gross district product in the year 2009-2010 are measured here. Here Principal Component analysis and Maximum Likelihood method of factor analysis are used for the seventeen variables of the gross district products of 64 districts. The results show that seventeen variables contributing to our GDP have been classified into three factors. Then we rename these three factors from principal component analysis as service factor, agriculture & infrastructure factor, and fishing & mining factor. In maximum likelihood method we rename the factors as service factor, agriculture & infrastructure factor, and education factor. At last we compare the factor scores as district-wise for the three factors to reflect their significance. The study finds a clear shift of contribution by the macroeconomic variables to the GDP of Bangladesh from agriculture to 'non-agriculture' sectors.

KEYWORDS

GDP, Factor Analysis, Factor Loading, Types of Factoring and Naming the Factors.

INTRODUCTION

The economy of Bangladesh has experienced significant shifts in trade, fiscal, industrial, agricultural and financial policies over last two decade. Yet, still the growth trend and the structural changes of GDP in Bangladesh are not satisfactory. Many problems are responsible for this unsatisfactory GDP: the shortage of domestic food production, narrow structure of exports, increasing growth rate of imports, failure in the invocation of much Foreign Direct Investment (FDI), a defective banking system with cumulative interest of loans, continuous loss in the public enterprises, poor infrastructure, inefficient taxation, high inflation rate, political instability and the serious deterioration of law and order situation. Its progress can be gleaned from the country's Real Gross Domestic Product (RGDP) growth of 5 percent on average for the period 1990 to 1998 and 4.6 percent for the period 1980 to 1990. The growth rate of Real Gross Domestic Product was above 6 percent on average and in 2009 it was just above 5.5 percent. All over the world (Bangladesh inclusive) GDP has been area of interest to both policy-makers and economists. In past, Bangladesh has received annually the equivalent of close to 6% of GDP in foreign assistance, although this figure has declined to around 4% in recent years. Bangladesh is significantly dependent on external resources and at the behest of the World Bank and the IMF, Bangladesh adopted a set of the short and medium-term economic management. External factors such as export, import, remittances and foreign aid have always played important roles to Bangladesh's economy, though the relative importance of various external factors has changed over time. The economy of Bangladesh has grown 5-6 per cent per year since 1996 despite inefficient government-controlled enterprises, delays in exploiting natural gas resources, insufficient power supplies, and delayed implementation of economic reform. Bangladesh remains a poor, overpopulated, and inefficiently-governed country. Although more than half of Gross Domestic Product (GDP) is generated through the service sector, nearly two-thirds of Bangladeshis are employed in the Agriculture, fisheries and farming sector, with rice as the single-most-important product. Garment exports and remittance inflows from Bangladeshis working overseas, mainly in the Middle East and East Asia, fuel growth of the economy. The economy of Bangladesh has experienced an average of 4% plus growth per annum throughout the 1990s. Even during the year of devastating floods (FY1999), the economy grew by 4.9%. Average GDP growth in the 1990s (FY1991-2000) was 4.78%, which was one percentage point higher than that of the previous decade (i.e. 3.74% in FY1981-90). The second half of the 1990s demonstrated a more impressive growth performance (5.29%, FY1996-2000) in comparison to the first half (4.49% for FY1991-95). According to the revised estimates, GDP growth rate in FY2001 was 5.16%. The experience of the 1990s has given rise to the hope that the real GDP growth in the coming years will be higher than what has already been achieved. The real GDP growth in FY2004 and FY2005 were expected to be 6.0% and 6.3%, respectively. In view of the importance of GDP and its vital role in the economic growth of a country, especially in developing countries, a number of studies have been carried out. Shamsuddin A. F. M. (1994) found that the market size of the host country as measured by per capita GDP is found to be the most important factor in attracting foreign direct investment (FDI) for 36 less developed countries for the year 1983.Banerjee A. and Marcellino M. (2002) evaluated the relative merits of two approaches to information extraction from a large data set for forecasting, namely, the use of an automated model selection procedure versus the adoption of a factor model. Hossain S. and Cheng M. (2002) in this study, a standard regression model is used to identify factors that significantly contribute to economic growth in Bangladesh. The result indicates that with the increased in import, the GDP will decline further. As a matter of fact, more than 60 percent of the imported items are for consumption purposes which are not likely to contribute much to GDP growth. Lin J. Y. and Li Y. (2002) reexamined that the previous studies under estimate the contribution of export to GDP growth of China by overlooking the indirect impacts of exports on domestic consumption, investment, government expenditures and imports and proposed a new estimation method and as well as found that a ten percent increase in exports resulted in a one percent increase in GDP in the 1990s in China, when both direct and indirect contributions are considered. Andersen T.M. and Herbertsson T. T. (2003) used the multivariate technique of factor analysis to combine several indicators of economic integration and international transactions into a single measure or index of globalization. Gallo J. L. (2004) studied the evolution of GDP disparities among 138 European regions over the period from 1980 to 1995. The results of the analysis indicate the persistence of regional disparities, a progressive bias toward a poverty trap, and the importance of geography in the convergence process. Shelley G. L. and Wallace F. H. (2004) examined the relation between inflation, M1 money, and real GDP in Mexico using annual data from 1944 to 1991. Predictable increases in differenced inflation are found to have a significant, negative effect on real GDP growth. Unpredictable increases in differenced inflation are found to have a significant, positive effect on real GDP growth. Schneider M. and Spitzer M. (2004) utilized a generalized dynamic factor model to produce short-term forecasts of real Austrian GDP. Also, the forecasting performance of the model with a large data set of 143 variables has been assessed relative to simple univariate time-series forecasts. Craigwell R. and Maurin A. (2005) established and characterized a reference cycle and concluded that the cycles of tourism and wholesale and

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retail closely resembles that of the aggregate business cycle, while the non-sugar agriculture and fishing cycle is counter acyclical for Barbados. Lise W. And Montfort K.V. (2005) tried to unfold the linkage between energy consumption and GDP by undertaking a co-integration analysis for Turkey with annual data over the period 1970–2003.In addition, they found evidence of a decoupling of energy consumption and economic growth in Turkey towards the end of the studied period 1970–2003.Schumacher C. (2005) studied the forecasting performance of alternative factor models based on a large panel of quarterly time series for the German economy and showed that the application of the dynamic factor models seems to provide only small forecasting improvements over the static factor model for forecasting German GDP. Troy Matheson T. (2005) focused on forecasting four key New Zealand macroeconomic variables using a dynamic factor model and a large number of predictors and found that the factor model performs particularly well at longer horizons. Raheem S.M.E et al (2006) analyzed Bangladesh's gross domestic product (GDP) data for the year 1999-2000 using factor analysis model to find out the contributing factors that affect GDP. The analysis has revealed two distinct factors-- 'non-agricultural' and 'agriculture and livestock' that are contributing to Bangladesh's GDP. Islam, T. S. et. al (2007) used the multivariate causality analysis to examine relationship between education and growth in Bangladesh using annual time series data from 1976 to 2003. The empirical results show evidence of bidirectional causality between education and growth in Bangladesh. Reininger M.T. and Fingerlos M.U. (2007) applied the econometric theory of seasonality to explain the seasonal characteristics of quarterly Belgian real GDP level time series from 1980 Q1 to 2006 Q4 by fitting a univariate model. Drăcea R. et.al (2008) have applied the methods concerning the analysis between the GDP and real tax systems within the two States: Turkey and Romania. The conclusion indicates the existence of a correlation between the real GDP and the real tax incomes, strongly manifested in Turkey as compared to Romania. Schumacher C. and Breitung J. (2008) discussed a factor model for short-term forecasting of GDP growth using a large number of monthly and quarterly time series in real-time and the factors were estimated by applying an EM algorithm, combined with a principal components estimator and proposed alternative methods for forecasting quarterly GDP with monthly factors .Ahmed H. A. and Uddin G. S. (2009) investigated the causal nexus between export, import, remittance and GDP growth for Bangladesh using annual data from 1976 to 2005. Study finds limited support in favor of export-led growth hypothesis for Bangladesh as exports, imports and remittance cause GDP growth only in the short run. Daga, et. Al (2009) examined and forecasted the trend of GDP during pre and post reform periods and tracks GDP movement for India. The sector comprising Trade, Transport, Storage and Communication were found to contribute the maximum and the sector comprising Financing, Insurance, Real Estate and Business Services were found to contribute the minimum to the GDP trend under study. Mitchell J. et. al (2009) derived monthly and quarterly series of UK GDP for the inter-war period and illustrated how the new data can contribute to the understanding of the economic history of the UK in the 1930s and have also used the series to draw comparisons between recession profiles in the 1930s and the post-war period.

Bangladesh experienced an accelerated pace of global integration of her economy in the 1990s. Economic reforms gained momentum in the 1990s and successive governments pursued an export-led growth strategy. In addition, Bangladesh was able to get increased market access with reduced tariff rates provided by some developed countries to export her commodities. Volume of foreign direct investment (FDI) gradually increased in the 1990s, and participation of Bangladeshi workers in the global labour market also increased, which resulted in increased remittances to the country. Thus, the 1990s was a decade of transition from *aid dependence* to *trade orientation* and enhanced integration of local economy with the global economy. The BBS compiled Gross Regional Domestic Product (GRDP) of twenty former regions (districts) at current and constant (1984-85) prices since 1979-80 to 1997-98. GRDP was estimated by eleven activity sectors. Recently GDP is rebased at 1995-96 prices and it includes 15 activity sectors. After the revision it is decided to estimate gross regional product and gross district product by 17 sectors both at current and constant (1995-96) prices. Due to some constraints, gross district product is estimated by disaggregating the country gross value added down to the regional and district level using certain ratios derived from case studies, survey findings population and housing census, agriculture census and various administrative records. The factors which have effect on the gross district product of the 64 districts from fiscal year 2007 to 2008 are seen in this study. The factor score for each division for the study period is also obtained here. The comparison based on factor scores between the districts for the factors for the given period is also obtained here. For the estimation of the factors, the constant prices of the gross district product of the 64 districts in Bangladesh are considered here, which includes all the activity sectors.

DATA AND METHODOLOGY

The data used in this study were collected from "Statistical Year Book of Bangladesh (2010)" published by Bangladesh Bureau of Statistics (BBS).By summing over the districts we find the GDP of our country. The central bank has declared 17 variables or sectors as vital in GDP of Bangladesh. The factors, having effect on the GDP as well as the comparisons between the 64 districts in our country on the basis of different factors of GDP for the given period have also been studied in this paper. For the purpose of estimation of gross domestic product, it includes 17 sectors:

i. Crop and horticulture
ii. Animal farming
iii. Forestry and related services
iv. Fishing
v. Mining and quarrying
vi. Manufacturing
vii. Electricity, gas and water supply
viii. Construction
ix. Wholesale and retail trade
x. Hotel and restaurants
xi. Transport, storage and communication
xii. Financial intermediation
xiii. Real estate renting and business services
xiv. Public administration and defense
xv. Education
xvi. Health and social work
xvii. Community, social and personal services

THE ORTHOGONAL FACTOR MODEL

The observable random vector $\mathbf{X}$, with p components, has mean μ and covariance matrix Σ. The factor model postulates that $\mathbf{X}$ is linearly dependent upon a few unobservable random variables $F_1, F_2, \cdots\cdots, F_m$, called *common factors*, and p additional sources of variation $\varepsilon_1, \varepsilon_2, \cdots\cdots, \varepsilon_p$, called

$$X_1 - \mu_1 = l_{11} F_1 + l_{12} F_2 + \cdots\cdots + l_{1m} F_m + \varepsilon_1$$
$$X_2 - \mu_2 = l_{21} F_1 + l_{22} F_2 + \cdots\cdots + l_{2m} F_m + \varepsilon_2$$
$$\vdots$$
$$X_p - \mu_p = l_{p1} F_1 + l_{p2} F_2 + \cdots\cdots + l_{pm} F_m + \varepsilon_p$$

error or sometimes *specific factors*. In particular, the factor analysis model is

(1)

or, in matrix notation,

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$$\underset{(p\times 1)}{\mathbf{X} - \boldsymbol{\mu}} = + \underset{(p\times m)}{\mathbf{L}} \underset{(m\times 1)}{\mathbf{F}} + \underset{(p\times 1)}{\boldsymbol{\varepsilon}}$$

(2)

Where, μ_i = mean of variable i

ε_i = i th *specific factor*

F_j = j th *common factor*

l_{ij} = *loading* of the i th variable on the jth factor

We assume that,
$$E(\mathbf{F}) = \underset{(m\times 1)}{\mathbf{0}}, \qquad Cov(\mathbf{F}) = E(\mathbf{FF}') = \underset{(m\times m)}{\mathbf{I}}$$

$$E(\boldsymbol{\varepsilon}) = \underset{(p\times 1)}{\mathbf{0}}, \qquad Cov(\boldsymbol{\varepsilon}) = E(\boldsymbol{\varepsilon\varepsilon}') = \underset{(p\times p)}{\boldsymbol{\psi}} = \begin{bmatrix} \psi_1 & 0 & \cdots & 0 \\ 0 & \psi_2 & \cdots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \cdots & \psi_p \end{bmatrix}$$

(3)

$$Cov(\boldsymbol{\varepsilon}, \mathbf{F}) = E(\boldsymbol{\varepsilon}\mathbf{F}) = \underset{(p\times m)}{\mathbf{0}}$$

and that $\mathbf{F}$ and $\boldsymbol{\varepsilon}$ are independent so,

These assumptions and the relation in (2) constitute the *orthogonal factor model.*

ANALYSIS AND DISCUSSION

From the GDP data on seventeen variables in 64 districts for the year 2009-10, let the variables are defined as:

X_1 = Crop and Horticulture
X_2 = Animal Farming
X_3 = Forestry and related services
X_4 = Fishing
X_5 = Mining and Quarrying
X_6 = Manufacturing
X_7 = Electricity, Gas and Water Supply
X_8 = Construction
X_{17} = Community, Social and Personal services

X_9 = Wholesale and Retail trade
X_{10} = Hotel and Restaurants
X_{11} = Transport, Storage and Communication
X_{12} = Financial Intermediation
X_{13} = Real state renting and Business service
X_{14} = Public administration and Defense
X_{15} = Education
X_{16} = Health and Social work

From our data set, the calculated correlation matrix of 17 variables from gross district product is given as follows:

Crop	1																
Animal	.36	1															
Forestry	.16	.39	1														
Fishing	.14	.48	.18	1													
Mining	.08	.26	.18	.27	1												
Manufacturing	−.11	−.15	−.07	−.01	.01	1											
Electricity	−.02	.04	.01	.06	.05	.82	1										
Construction	.08	.36	.12	.16	.05	.31	.42	1									
R = *Wholesal&Retail*	.01	.07	−.01	.15	.07	.77	.83	.38	1								
Hotel	−.05	−.01	−.04	.14	.08	.90	.92	.40	.85	1							
Transport	−.02	.05	−.01	.16	.08	.84	.95	.44	.86	.98	1						
Financial	−.01	.05	.01	.11	.07	.83	.97	.47	.82	.95	.97	1					
Realstate	.04	.19	.07	.22	.10	.81	.93	.48	.86	.95	.98	.95	1				
PublicAdmin	−.05	−.05	−.04	.05	.02	.84	.98	.40	.82	.95	.97	.98	.93	1			
Education	.08	.37	.16	.29	.11	.75	.56	.34	.53	.64	.58	.60	.63	.54	1		
Health&Social	.11	.35	.12	.34	.18	.74	.89	.52	.83	.90	.94	.91	.97	.87	.68	1	
Community	.21	.60	.23	.53	.26	.49	.65	.50	.65	.69	.74	.70	.81	.62	.63	.89	1

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The eigen values and factor analysis models for the gross district product data are discussed in the following table:

TABLE-01: INITIAL EIGEN VALUES, % OF VARIANCE, AND CUMULATIVE % OF VARIANCE

Component	Initial Eigen values		
		% of Variance	Cumulative %
1	9.525	56.031	56.031
2	2.561	15.064	71.095
3	.977	5.746	76.841
4	.839	4.933	81.774
5	.828	4.869	86.642
6	.740	4.352	90.994
7	.604	3.555	94.549
8	.395	2.325	96.874
9	.246	1.447	98.321
10	.141	.831	99.152
11	.053	.311	99.463
12	.034	.200	99.663
13	.026	.154	99.816
14	.012	.071	99.888
15	.009	.052	99.940
16	.008	.049	99.989
17	.002	.011	100.000

The first factor has an eigen value of 9.525. Since this is greater than 1, it explains more variance than a single variable. The percent of variance explained

$$= (9.525/17 \text{ units of variance}) \times 100 = 56.01\%$$

.The second factor has an eigen value of 2.561. Since this is greater than 1, it explains more

variance than a single variable. The percent of variance explained $$= (2.516/17 \text{ units of variance}) \times 100 = 14.8$$ % .The third factor has an

eigen value of 0.977. Since this is close to 1, it may explain variance of a single variable. The percent of variance explained

$$= (0.977/17 \text{ units of variance}) \times 100 = 5.75\%$$

.

14 factors among 17 variables have eigen values less than 1, and therefore explain less variance that a single variable. We have found two eigen values greater than unity here and one is close to unity. Since first three factors express almost 77% of the total variance, we will consider the three factors model.

FIGURE-01: SCREE PLOT
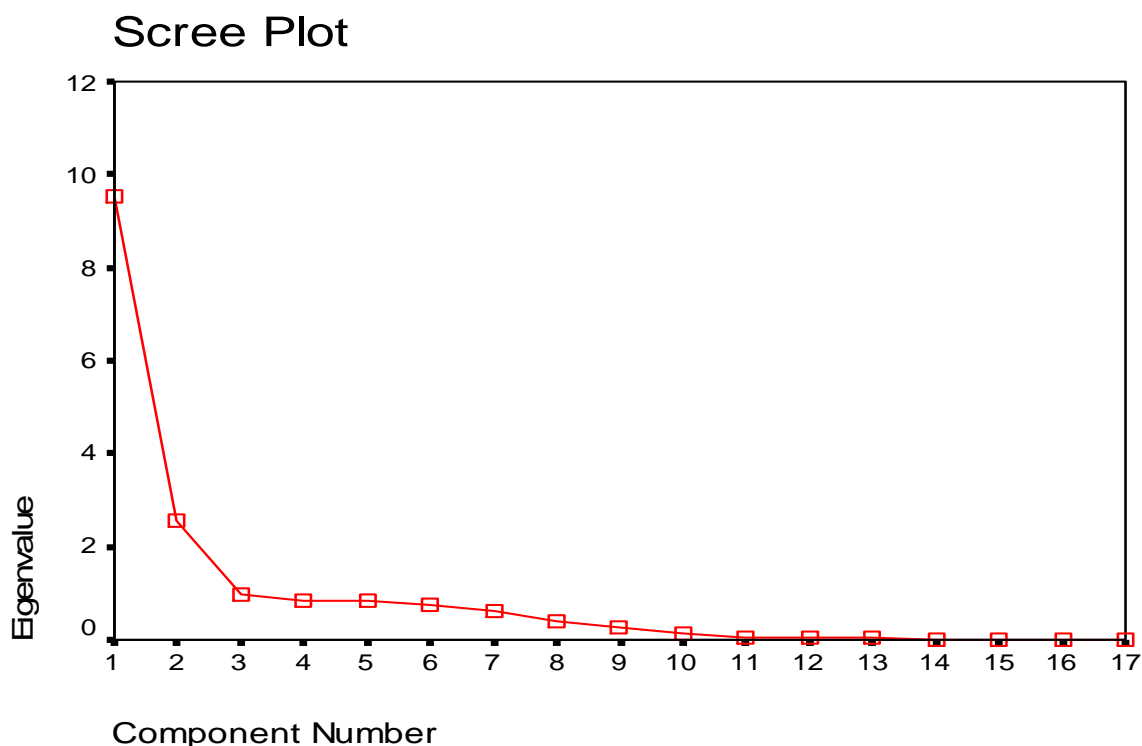
From the scree plot we observe that, the first two eigen values are above 1 and the third value is 0.977 which is very close to 1. So we consider 3 factors model for our analysis.

RESULTS OF PRINCIPAL COMPONENT METHOD WITH VARIMAX ROTATION

The results of principal component method with Varimax rotation are given below:

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TABLE-02: RESULTS OF PRINCIPAL COMPONENT METHOD WITH VARIMAX ROTATION

Variables	Three - factor solution						Communality
	Estimated factor loadings			Estimated rotated factor loadings			
	F_1	F_2	F_3	F_1^*	F_2^*	F_3^*	$\hat{h}_i^2$
crops & horticulture	.033	.478	-.551	-.051	.714	-.142	.533
forestry & related services	.195	.872	-.133	.026	.786	.445	.816
animal farming	.064	.545	-.041	-.041	.457	.303	.303
fishing sector	.239	.647	.311	.106	.344	.666	.572
mining & quarrying	.126	.430	.669	.031	-.061	.803	.649
manufacturing sector	.855	-.318	.063	.899	-.164	-.031	.836
electric, gas and water supply	.943	-.190	-.034	.962	.008	-.019	.926
construction	.515	.259	-.313	.461	.466	-.024	.430
wholesale & retail trade	.876	-.114	.008	.881	.031	.051	.781
hotel & restaurants	.963	-.190	.056	.981	-.044	.055	.967
transport, storage & Communication	.976	-.140	.015	.984	.021	.054	.973
financial intermediation	.963	-.151	-.031	.974	.038	.010	.951
real state renting & business service	.983	-.009	-.020	.967	.145	.106	.967
public administration & defense sector	.940	-.259	-.022	.973	-.053	-.052	.952
Education sector	.707	.218	.026	.651	.254	.243	.548
health and social work sector	.972	.166	-.006	.922	.271	.221	.973
community, social & personal service sector	.808	.483	.012	.700	.482	.405	.886
Cumulative proportion of total sample variance explained	56.031	71.095	76.841	54.513	66.876	76.841	

From the table above we can see that, the proportion of total variance explained by the three-factor solution (76.841) is appreciably larger than that for the one factor solution (56.03). In Varimax rotation three-factor solution expresses same proportion of total variance than one factor solution.

According to unrotated solution of principal factor analysis we can see that the last 12 variables of the gross district product loads highly on the first factor F_1 and might be called as *Service factor* and first 4 variables loads highly on the second factor F_2 and might be called as *Agriculture factor*. Only one variable "mining and quarrying" loads highly on the third factor F_3 and can be renaming as *Mining factor*.

After Varimax rotation we have found that the "construction" variable which had high loading on the first factor (F_1) of unrotated solution have high loading on the second factor (F_2^*) of the rotated solution. Similarly the "fishing" variable which had high loading on the F_2 before rotation have high loading on F_3^*. So according to the rotated solution of principal factor analysis we can rename the factors as *Service, Agriculture & infrastructure, and Fishing & mining factor* respectively.

RESULTS OF MAXIMUM LIKELIHOOD METHOD WITH VARIMAX ROTATION

The results of maximum likelihood method with Varimax rotation are given below:

TABLE- 03: RESULTS MAXIMUM LIKELIHOOD METHOD WITH VARIMAX ROTATION

Variables	Three - factor solution						Communality
	Estimated factor loadings			Estimated rotated factor loadings			
	F_1	F_2	F_3	F_1^*	F_2^*	F_3^*	$\hat{h}_i^2$
crops & horticulture	.037	.310	.170	-.021	.352	-.049	.125
forestry & related services	.200	.685	.493	.022	.867	.015	.745
animal farming	.059	.278	.207	-.014	.351	.005	.122
fishing sector	.237	.448	.360	.100	.610	.069	.383
mining & quarrying	.131	.216	.212	.049	.319	.066	.110
manufacturing sector	.872	-.487	.027	.797	-.198	.571	.999
electric, gas and water supply	.926	-.041	-.319	.978	-.025	.062	.939
construction	.480	.225	.044	.436	.302	.040	.283
wholesale & retail trade	.862	-.039	-.087	.835	.094	.214	.751
hotel & restaurants	.960	-.138	-.151	.947	-.001	.255	.962
transport, storage & Communication	.969	-.011	-.205	.978	.072	.141	.960
financial intermediation	.943	-.028	-.286	.982	.008	.083	.972
real state renting & business service	.980	.095	-.111	.956	.212	.150	.982
public administration & defense sector	.921	-.093	-.364	.988	-.094	.058	.988
Education sector	.733	-.197	.453	.519	.247	.672	.769
health and social work sector	.975	.221	.016	.908	.383	.168	.999
community, social & personal service sector	.809	.451	.233	.679	.657	.142	.911
Cumulative proportion of total sample variance explained	55.339	64.222	70.999	51.493	65.083	70.999	

From the table above we can see that, the proportion of total variance explained by the three-factor solution (70.99%) is appreciably larger than that for the one factor solution (55.34%). In Varimax rotation three-factor solution expresses more proportion of total variance than one factor solution.

According to unrotated solution of maximum likelihood analysis we can see that the last 12 variables of the gross district product loads highly on the first factor F_1 and might be called as *Service factor* and first 5 variables loads highly on the second factor F_2 and might be called as *Agriculture & infrastructure factor*. And no variable has high loading on third factor.

After Varimax rotation we have found that the "education" variable which had high loading on the first factor (F_1) of unrotated solution have high loading on the third factor (F_3^*) of the rotated solution. So according to the rotated solution of maximum likelihood method we can rename the factors as *Service, Agriculture & infrastructure, and Education factor* respectively.

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TEST OF HYPOTHESIS

The three-factor maximum likelihood analysis of data was presented in 4.2. In the residual matrix there suggests that a three factor solution may be adequate.

Now we test the hypotheses
$$H_0 : \sum_{(17 \times 17)} = \mathbf{L}_{(17 \times 3)} \mathbf{L}'_{(3 \times 17)} + \boldsymbol{\psi}_{(17 \times 17)}$$
, with $m = 3$, at level $\alpha = 0.05$.

The test statistic is based on the ratio of generalized variances as we determine

$$\frac{\left|\hat{\Sigma}\right|}{\left|S_n\right|} = \frac{\left|\hat{L}\hat{L}' + \hat{\psi}\right|}{\left|S_n\right|} = \frac{\left|L_z\hat{L}_z + \hat{\psi}_z\right|}{\left|R\right|} = \frac{0.00000000000336}{0.000000000000796} = 4.22$$

Using Bartlett's correction, we evaluate the test statistic as below:

$$\left[64 - 1 - \frac{(34 + 12 + 5)}{6} \right] \ln(4.22) = 78.471$$

Since, $\frac{1}{2}\left[(p-m)^2 - p - m\right] = \frac{1}{2}\left[(17-3)^2 - 17 - 3\right] = 88$, the 5% critical value $\chi^2_{88,.05} = 115.84$ is not exceeded by the calculated value

78.471, hence we fail to reject H_0. We conclude the data do not contradict a three-factor model.

TABLE-04: SORTED FACTOR SCORES TABLE OF TOP TEN DISTRICTS

Factor 1		Factor 2		Factor 3	
District	Factor Score	District	Factor Score	District	Factor Score
Dhaka	7.17612	Mymensingh	2.8142	Brahamanbaria	2.88663
Chittagong	2.49538	Narail	2.65717	Sylhet	2.47533
Khulna	0.52531	Bogra	2.39893	Habiganj	2.23617
Narayanganj	0.49076	Comilla	2.09287	Chittagong	2.2207
Bandarban	0.46775	Faridpur	2.01663	Cox's Bazar	2.22058
Comilla	0.36773	Tangail	1.65246	Bogra	1.58574
Gazipur	0.32167	Naogaon	1.5098	Mymensingh	1.47769
Mymensingh	0.25718	Jessore	1.1575	Dinajpur	1.38043
Rajshahi	0.23588	Chittagong	1.02814	Khulna	1.12377
Natore	0.1626	Rangpur	0.97971	Comilla	1.08484

This table represents the 64 districts according to their scores on each factor in descending order. Each district has individual scores on each factor. We can see that the district Dhaka have highest score on the first factor whether the districts Mymenshing and Brahmanbaria have highest scores on second factor and third factor respectively.

FIGURE-02: FACTOR SCORES OF 64 DISTRICTS
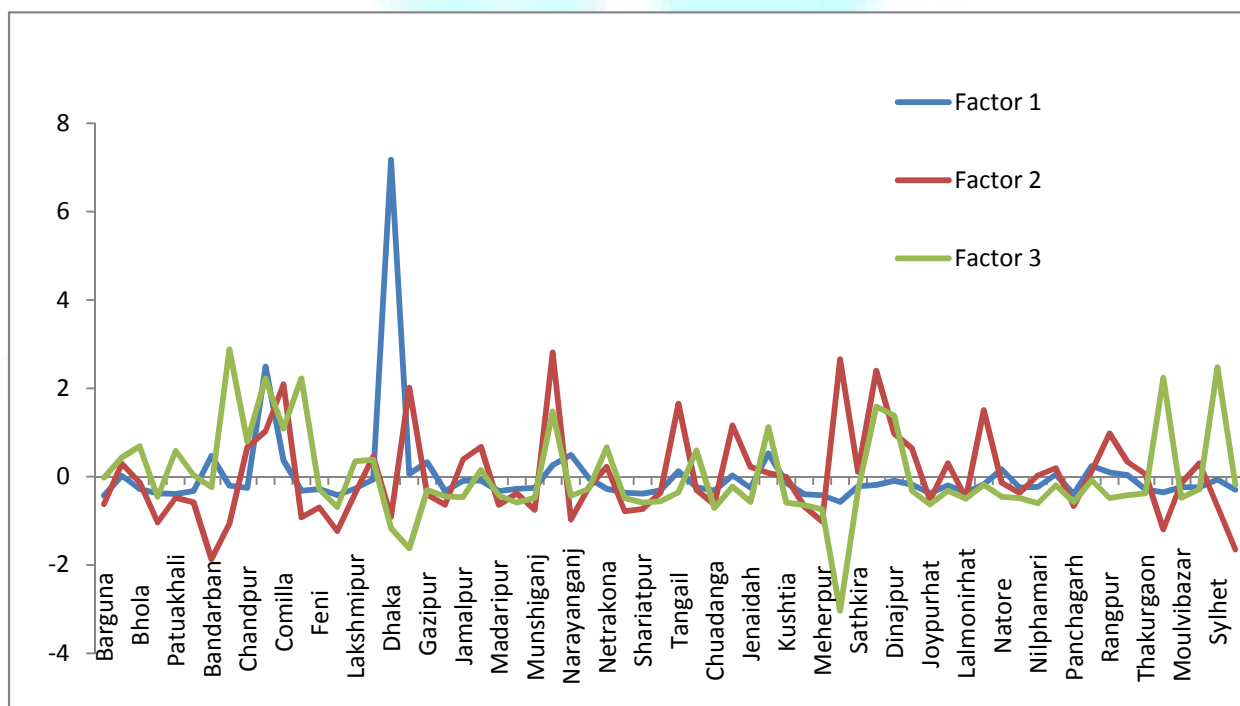
This graph is plotted by districts against their scores on each factor. Scores of districts on each factor can be compared from this figure such as district Dhaka have highest score on factor 1, but have low score on 2nd factor and negative score on 3rd factor.

We have renamed the three factors in principal component analysis as *Service factor*, *Agriculture & infrastructure factor*, and *Fishing & mining factor*. The first factor consist manufacturing sector, electric, gas and water supply, wholesale & retail trade, hotel & restaurants, transport, storage & Communication, financial

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intermediation, real state renting & business service, public administration & defense sector, education sector, health and social work sector, community, social & personal service sector. Second factor consist crops & horticulture, forestry & related services, animal farming, construction and the third factor consist fishing sector, mining & quarrying. We used two methods principal component and maximum likelihood to calculate the factors and both methods gives the almost equal but not the same result. In maximum likelihood method we rename the three factors as *Service factor, Agriculture & infrastructure factor, and Education factor*. The first factor consist manufacturing sector, electric, gas and water supply, construction, wholesale & retail trade, hotel & restaurants, transport, storage & Communication, financial intermediation, real state renting & business service, public administration & defense sector. Second factor consist crops & horticulture, forestry & related services, animal farming, fishing sector, mining & quarrying; and the third factor consist education sector. The common variables of service factor both in MLM and PCM are same except education variable and construction variable. Education, which was in service factor in PCM, is in third factor (*Education factor*) in MLM. Construction, which was in agriculture & infrastructure factor in PCM, is in the service factor in MLM. In PCM third factor (*Fishing & mining factor*) is constructed by fishing variable and mining variable only whereas in MLM both these variables are included in the second factor (*Agriculture & infrastructure factor*). In MLM third factor (*Education factor*) consists only a single variable "education" of gross district product. According to the test of hypothesis we found that three-factor model is adequate for the data. We calculate the scores of districts on each factor and found that the district Dhaka have highest score on the first factor whether the districts Mymenshing and Brahmanbaria have highest scores on second factor and third factor respectively as shortly stated.

From the above analysis, it is evident that three major factors are influencing Bangladesh's GDP. The first factor explains the service related activities in industrial and business of the country while the second factor is purely dominated by agricultural and livestock sectors and the last factor is purely dominated by agricultural and livestock sectors. Out of the analysis of GDP data, we find industrial and business sector to be more dominating than the agricultural sector as far as contribution to the GDP is concerned. This indicates a clear shift of contribution to the GDP from agriculture to 'non-agriculture' sectors. The study suggests further analysis of successive year's of GDP data (if available) to investigate if there is any trend in the shift of contributing factors from agriculture to industrial and business sectors.

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APPENDIX
APPENDIX-A

TABLE-05: SORTED FACTOR SCORES TABLE BY DISTRICTS

Factor 1		Factor 2		Factor 3	
District	Factor Score	District	Factor Score	District	Factor Score
Dhaka	7.17612	Mymensingh	2.8142	Brahamanbaria	2.88663
Chittagong	2.49538	Narail	2.65717	Sylhet	2.47533
Khulna	0.52531	Bogra	2.39893	Habiganj	2.23617
Narayanganj	0.49076	Comilla	2.09287	Chittagong	2.2207
Bandarban	0.46775	Faridpur	2.01663	Cox's Bazar	2.22058
Comilla	0.36773	Tangail	1.65246	Bogra	1.58574
Gazipur	0.32167	Naogaon	1.5098	Mymensingh	1.47769
Mymensingh	0.25718	Jessore	1.1575	Dinajpur	1.38043
Rajshahi	0.23588	Chittagong	1.02814	Khulna	1.12377
Natore	0.1626	Rangpur	0.97971	Comilla	1.08484
Tangail	0.1194	Dinajpur	0.97467	Chandpur	0.79669
Rangpur	0.09109	Kishoreganj	0.67029	Bhola	0.68717
Faridpur	0.06538	Chandpur	0.6674	Netrakona	0.66669
Pabna	0.04615	Gaibandha	0.63937	Bagerhat	0.59465
Sirajganj	0.03536	Noakhali	0.45517	Patuakhali	0.58555
Jessore	0.02575	Jamalpur	0.39354	Barisal	0.43122
Barisal	0.0237	Sirajganj	0.33135	Noakhali	0.38458
Narsingdi	-0.03693	Kurigram	0.30428	Lakshmipur	0.34513
Sylhet	-0.06606	Sunamganj	0.30117	Kishoreganj	0.14973
Noakhali	-0.06943	Barisal	0.29681	Pirojpur	0.03695
Kishoreganj	-0.08844	Netrakona	0.22071	Barguna	-0.02618
Dinajpur	-0.09739	Jenaidah	0.21759	Rajshahi	-0.0777
Jamalpur	-0.09867	Pabna	0.19445	Rangamati	-0.18032
Kushtia	-0.13818	Rajshahi	0.11858	Naogaon	-0.19237
Naogaon	-0.17417	Sathkira	0.10526	Pabna	-0.20066
Gaibandha	-0.18	Khulna	0.08088	Jessore	-0.22712
Bogra	-0.19088	Thakurgaon	0.05781	Bandarban	-0.24326
Kurigram	-0.19965	Nilphamari	0.02831	Narsingdi	-0.2801
Brahamanbaria	-0.20539	Kushtia	-0.00911	Sunamganj	-0.2871
Sathkira	-0.21703	Bhola	-0.13278	Feni	-0.29041
Nilphamari	-0.22979	Natore	-0.13674	Gazipur	-0.30827
Bagerhat	-0.24018	Moulvibazar	-0.14277	Sathkira	-0.31612
Moulvibazar	-0.24253	Narsingdi	-0.24363	Kurigram	-0.31835
Sunamganj	-0.24384	Bagerhat	-0.3011	Gaibandha	-0.32437
Nawabganj	-0.24706	Sherpur	-0.36407	Tangail	-0.35983
Munshiganj	-0.25397	Nawabganj	-0.3727	Thakurgaon	-0.37529
Chandpur	-0.25626	Manikganj	-0.37682	Sirajganj	-0.42194
Jenaidah	-0.25838	Lakshmipur	-0.38033	Madaripur	-0.4261
Lakshmipur	-0.27109	Gazipur	-0.40632	Narayanganj	-0.43665
Manikganj	-0.27324	Patuakhali	-0.48154	Gopalganj	-0.44832
Netrakona	-0.27936	Lalmonirhat	-0.48569	Natore	-0.45574
Bhola	-0.28435	Joypurhat	-0.52823	Jhalokati	-0.45732
Feni	-0.28516	Pirojpur	-0.58184	Jamalpur	-0.46792
Thakurgaon	-0.29291	Barguna	-0.62627	Munshiganj	-0.47908
Rangamati	-0.29711	Chuadanga	-0.62892	Moulvibazar	-0.48242
Sherpur	-0.31127	Gopalganj	-0.63965	Nawabganj	-0.48472
Chuadanga	-0.31721	Madaripur	-0.64243	Rangpur	-0.48824
Cox's Bazar	-0.32338	Panchagarh	-0.66674	Rajbari	-0.4906
Madaripur	-0.32392	Sylhet	-0.6737	Lalmonirhat	-0.50125
Gopalganj	-0.32499	Magura	-0.67539	Sherpur	-0.56088
Pirojpur	-0.32952	Feni	-0.70032	Jenaidah	-0.57145
Habiganj	-0.35424	Shariatpur	-0.73415	Panchagarh	-0.57349
Lalmonirhat	-0.35594	Munshiganj	-0.75623	Shariatpur	-0.58526
Rajbari	-0.36415	Rajbari	-0.78737	Manikganj	-0.5879
Jhalokati	-0.37892	Dhaka	-0.9146	Kushtia	-0.58866
Joypurhat	-0.37993	Cox's Bazar	-0.92138	Nilphamari	-0.60151
Shariatpur	-0.38492	Narayanganj	-0.96977	Joypurhat	-0.63406
Patuakhali	-0.38929	Meherpur	-1.01905	Magura	-0.64515
Magura	-0.40067	Jhalokati	-1.04143	Khagrachhari	-0.69028
Panchagarh	-0.40152	Brahamanbaria	-1.06787	Chuadanga	-0.71068
Meherpur	-0.41885	Habiganj	-1.19565	Meherpur	-0.74324
Khagrachhari	-0.42479	Khagrachhari	-1.23365	Dhaka	-1.16945
Barguna	-0.42957	Rangamati	-1.6537	Faridpur	-1.62186
Narail	-0.57667	Bandarban	-1.87309	Narail	-3.03866

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DETERMINANTS OF FOOD INSECURITY AMONG HOUSEHOLDS IN ADDIS ABABA CITY, ETHIOPIA

GIRMA GEZIMU
LECTURER
AKSUM UNIVERSITY
SHIRE CAMPUS
ETHIOPIA

GIRMA BEREHE
LECTURER
COLLEGE OF BUSINESS AND ECONOMICS
MEKELLE UNIVERSITY
ETHIOPIA

ABSTRACT

Even though there is long-held belief that urban populations are better off, or even favored than rural populations, the recent food and financial crises have highlighted the problem of urban food insecurity in developing countries. Hence, the overall objective of this study was to examine the determinants of food insecurity among urban households in Addis Ababa city. To do so, both descriptive statistics and econometric analysis were employed. Descriptive statistics used Foster, Greer and Thorbeck distributional measure of food insecurity while econometric analysis used binary logistic regression model to analyze the data of a set of socio-economic variables as explanatory variables and food insecurity as independent variable. The head count index shows that 58.16 percent of the total households below the food insecurity line. The food insecurity gap and severity were 20 and 9.4 percent respectively. The result of the logistic regression model estimate indicates that out of the 10 factors included, 6 variables were found to have a significant influence on the probability of being food insecure at less than 10% significance level. The variables considered were household size, age of household head, household head education, and access to credit, household asset possession, and access to employment. Efforts should be made to improve income earning capacity of households, their education level with particular focus on vocational training, reduce household size with a view to reducing their dependency ratio and access of credit to the needy and trained people needs to be provided with proper targeting criterion.

KEYWORDS

food, food insecurity, probability of being food insecure, severity, urban.

INTRODUCTION

Food is essential in human being's life. Enough food in terms of quantity and quality for all people is an important factor for a nation to continue its development. Lack of food in long terms will lead to hunger and starvation that can cause death. So that enough food is a necessity condition to be well nourished (Sila and Pellokila, 2007).

However, the world is home to over one billion under nourished people, over 98% of who lives in the developing world (FAO, 2008). The population of the developing world is becoming more urban, with the urban population projected to double from 1.7 billion in 1995 to 3.4 billion in 2020 (Maxwell et al, 2000). These countries are not capable enough to provide sufficient food for their expanding urban population. This leads to increased food insecurity and prevalence of poverty in the urban areas.

Urban populations in Africa are growing rapidly, and inequality is increasing. The major urban food problems of the 1970s and 1980s, food shortage and price shocks, have apparently been largely resolved at least in the short to medium term. Because of this, urban food security having long been defined as the issue of feeding the cities has dropped off the political agenda of urban planners and urban managers; indeed, specifically urban food security problems in Africa receive little attention from national food or nutrition policy planners (Maxwell, 1998).

As in many developing countries, food security assessments in Ethiopia have traditionally focused on rural areas, where the majority of the total population as well as the poorest and most food insecure segments of the population lives (Mekonnen, 2000). Nevertheless, the global increase of cereal and pulses price and the global financial crisis has put challenges on and increases food insecurity in urban areas of the country. This further driven by unemployment, underemployment, lack of sanitation, rising cost of living, reduced inter-dependency among urban households, household composition, low asset ownership, low level of education, high dependency on the informal sector, HIV/AIDS (estimated at 7.7% prevalence in urban areas) and increased population pressure due to natural growth and rural-urban migration (WFP, 2009).

REVIEW OF THE LITERATURE

Food security is defined in different ways by international organizations and researchers without much change in basic concept. According to FAO (1983) food security defined as ensuring that all people at all times have both physical and economic access to the food they need. World Bank (1986) defined it as access by all people at all times to sufficient food for an active and healthy life. Von Braun et al (1992) defined food security as access by all people at all times to the food required for a healthy life. In 1996, the World Food Summit defines food security as 'Food security exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life'.

Like as food security, food insecurity definition is forwarded by different researchers and international organizations. According to World Bank (1986) food insecurity can be defined as 'the lack of capability to produce food and to provide access to all people at all times to enough food for an active and healthy life'. Hamilton (2000) defined food insecurity as limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. In 1996, the World Food Summit explain that food insecurity exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. This definition of food security is the most widely used definitions of food security. This definition integrates stability, access to food, availability of nutritionally adequate food and the biological utilization of food. Therefore, for the purpose of this study, the definition put forward by World Food Summit (1996) was taken as a working definition of food security and the household level is considered as the key unit of food insecurity analysis

According to WFP (2009) the main determinants of food insecurity in urban context are: food availability-food supplies in to market, food access- purchasing power and access to market and food utilization- health and morbidity status. Von Braun et al. (1992) denoted that food security is composed of availability of food, access to food, and risks related to either availability or access. Variation in national, regional or local availability of food can contribute to food insecurity. Garrett and Ruel (1999) suggested that access that a household has to food depends on whether the household has enough income to purchase food at prevailing prices or has sufficient land and other resources to grow its own food. The study conducted by Bonnard (2000) showed that, household ability to achieve food security in urban area is derived from the household's human, material, and institutional resource bases, which are often collectively referred in

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the literature as "food security factors." These factors include the educational and employment status, household demographics, urban agriculture, assets, saving, formal social assistance or direct transfer, informal social networks, access to clean water and sanitation and cost of living. The study of Urban Livelihoods and Food and Nutrition Security in Greater Accra, Ghana indicated that household food availability is a function of food prices, household demographics and household tastes and preferences (Maxwell et al., 2000). MSSRF and WFP (2002) in study of food insecurity Atlas of urban India, revealed that factors such as unemployment, illiteracy, infant mortality rate, lack of toilet facilities and safe drinking water, discrimination at social level and little political attention for urban areas determine food insecurity in urban India.

Mucavele (2001) suggested that the main factors that affect food security in urban Maputo, Mozambique, are poverty, low family income, low availability of general alimentation at the family level, floods, family crisis, high unemployment levels and low levels of schooling and training and the absence of a social security system to alleviate the urban shocks. Von Braun et al, (1993) denoted that, employment and wages, along with prices and incomes, play the central role in determining the food security status of urban households.

The situation in Ethiopia is not much different from the conditions in other developing regions. For example, WFP (2009) stated that the common factors that cause household food-insecurity in urban areas of the country are: household size, age of household, sex of household head, marital status of household, education level of household, dependency ratio, access to credit, ownership of saving account, total income per adult equivalent, expenditure level (food and non-food), asset possession, access to social services, owner of home garden, access to subsidized food, sources of food, availability of food commodities, and supply of food commodities.

IMPORTANCE OF THE STUDY
A study of determinants of urban household food insecurity is vital because it provides with information that will enable effective measures to be undertaken so as to improve food security status and bring the success of food security development programs. It will also enable development practitioners and policy makers to have better knowledge as to where and how to intervene in urban areas to bring food security or minimize the severity of food insecurity. Area specific identification of determinants of the food insecurity will ease the implementation of different development projects in the Addis Ababa city.

STATEMENT OF THE PROBLEM
Though Ethiopia has abundant natural resources, most of its socioeconomic indicators are extremely low. In Ethiopia food shortage has aggravated the already poor economy of the country. Both chronic and transitory problems of food insecurity are widespread and severe in both rural and urban areas of the country (FDRE, 2002). However, a lot of studies conducted so far in the field give more emphasis to the rural area of the country (Eden, Nigatu and Ansha, 2009, Frehiwot 2007, Abebaw 2003, Tesfaye 2005, Sisay and Tesfaye 2003).   But such partial assessments do not verify situations at grass root level and hide the true food insecurity problem of the country. Furthermore such studies do not look the underlying causes of food insecurity of household at the urban settings. The extent of food insecurity problem differs from place to place and in accordance to the social position and actual life conditions. So that research undertaking in area of food insecurity at the Addis Ababa city is essential since the results may give spot light to development planners in order to combat its problem at the urban level.

OBJECTIVE OF THE STUDY
The overall objective of the study was to examine the socio economic determinants of food insecurity among urban households in Addis Ababa city. The specific objectives of the study were:
- To estimate the food insecurity gap and its severity among urban households and,
- To identify the determinants of food insecurity among urban households.

HYPOTHESIS
- Households with larger size are more prone to food insecurity.
- Households engaged in more income generating activities are more likely to experience food security.
- Households with access to credit service are less likely to face food insecurity compared to those with less access.

RESEARCH METHODOLOGY
DATA SOURCES AND SAMPLE SIZE
The study used the 2006/07 Young Lives household survey conducted by Young Lives of the Ethiopia. The survey gathered qualitative and quantitative data pertaining to social, demographic and economic aspects of households. The method of data collection used purposive and simple random sampling strategies. The selection of the sentinel sites followed a purposive sampling strategy, whereas the household selection within each sentinel site was done using simple random sampling. This is due to the research targeted the poor and food deficiency areas of the city. Accordingly, 423 households were covered in Young Lives household survey from Addis Ababa city. Therefore, the present analysis based on 423 sample households randomly selected from Young Lives site in the city.
METHOD OF DATA ANALYSIS
The data collected were subjected to both descriptive statistics and econometrics analysis such as Foster, Greer and Thorbeck index of food insecurity and binary logit regression. A separate food insecurity line was developed for area. To achieve this, the cost of basic need method as proposed by Revalion and Bidani (1994) was used. This is mostly done through identifying the food insecure 50% of the sample population as a reference group with the assumption that in study area the food insecure part of society is above 50 percent. The food consumption behavior of the reference group accesses to determine average quantities in per adult equivalent of basic food items that makeup the reference food basket. In this case, the basket makes up of the mean consumption levels (purchase, remittance and from aid) of basic food items. The calorie value of each food items constructs from World Health Organization (WHO) of the food nutrition table. The total calorie obtained from consumption of this basket of average quantity per adult by an individual is:

$$\sum q_i Kcal_i = T *$$, with T $\cong T *'$. But $T *' \neq T$

Where T * = total calorie obtained by individual adult from consuming the average quantities.

q_i = average quantity per adult of food item 'i 'consumed by individual

Kcl_i = the caloric value of the respective food item 'i 'consumed by individual adult

T   = recommended calorie per day per adult for Ethiopia (in this case, 2200 kcalorie)

The average quantity per adult of each food item scales up and down by a constant value $\left(\dfrac{T}{T *}\right)$ so as to provide total of 2,200 kcalorie per adult per day before doing any activities. Then, multiply each food items after scaling up and down by the median price and sum up to get a food insecurity line.
A household was then considered food secure or insecure if the daily recommended calorie was equal or above and below the food insecurity line respectively. The degree of food insecurity was estimated using the Foster, Greer and Thorbeck (FGT) equation shown as:

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$$P_\alpha = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{z - y_i}{z} \right)^\alpha \quad \ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Where,

α = Degree of food insecurity for taking values of 0, 1 and 2 for headcount, short-fall and severity of food insecurity,

N= total number of sample households,

q= number of food insecure households,

Z = the cutoff between food security and insecurity

y_i= the measure of per adult equivalent food calorie intake of the ith household

To examine the effect of demographic and socio economic characteristics on food insecurity and the probability of household being food insecure, data were collected on variables such as household size, household head age, sex, education, dependency ratio, access to various services, access to credit service, access to employment, asset possession and food aid. On the assumption that the probability of a household being food insecure is determined by underlying response variable that capture the true economic status of the household, the underlying response variable in the case of binary status was defined by binary logit regression relation. Following Gujarati (1995) and Green (2003), the functional form of logit model is specified as follows:

$$P(Y_i = 1) = \frac{1}{1 + e^{-(\beta_0 + \beta_i Xi)}} \quad \ldots\ldots\ldots\ldots\ldots\ldots(2)$$

For ease of exposition, we write (2) as:-

$$P(Y_i = 1) = \frac{1}{1 + e^{-Z_i}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots(3)$$

Where: P (Yi=1) is the probability that a household being food insecure, Zi= the function of a vector of n explanatory variables), e- represents the base of natural logarithms and equation (3) is the cumulative distribution function. If P (Yi=1) is the probability of being food insecure, then 1- P (Yi=0) represents the probability of being food secured and is expressed as:

$$1 - P(Y_i = 1) = 1 - \frac{1}{1 + e^{-Z_i}} = \frac{1}{1 + e^{Z_i}} \quad \ldots\ldots\ldots\ldots\ldots\ldots(4)$$

Therefore we can write**:-**

$$\frac{P(Y_i = 1)}{1 - P(Y_i = 1)} = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (5)$$

Equation (5) simply is the odds ratio, the ratio of the probability that a household will be food insecure to the probability that it will be food secured. Taking the natural log of equation (5), we obtain

$$L_i = \ln\left(\frac{p(Y_i = 1)}{1 - P(Y = 1_i)} \right) = Z_i \quad \ldots\ldots\ldots\ldots\ldots\ldots (6)$$

Where: Li is the log of the odds ratio which is not only linear in the explanatory variables but in the parameters also.

Thus introducing the stochastic error term (u_i), the logit model can be written as.

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + - - - + B_n X_i + u_i \quad \ldots\ldots\ldots\ldots (7)$$

Where:

β_0 is an intercept

$\beta_1, \beta_2 \ldots\ldots \beta_n$ are slopes of the equation in the model

Xi = is vector of relevant household characteristics

RESULTS AND DISCUSSIONS
DESCRIPTIVE RESULTS
This section reports the descriptive results of the study. Based on the food insecurity threshold point as a benchmark, 246 sample households (58.16%) were found to be unable to meet their minimum subsistence requirement and 177 households (41.84%) were found to meet their minimum subsistence require.

The FGT indices namely head count ratio, short-fall and severity of food insecurity are used to show how much the magnitude of food insecurity looks like in the study area.

TABLE 1: FGT RESULT OF TOTAL FOOD INSECURITY SITUATION IN THE STUDY AREA

	Total Food Insecurity			
	Index	Std. Err.	[95% Conf. interval]	
Head count ratio	.58	.024	57.96	58.04
Short- fall	.20	.012	.17648	.22352
Food insecurity severity	.094	.007	.08028	.10772

Source: computed from survey result

Table 1 show that the headcount ratio, short- fall and severity of food insecurity were 58, 20 and 9.4 percent respectively. This implies 58 percent of the sampled households cannot meet the energy requirement recommended for subsistence. Each food insecure household needs 20 percent of the daily caloric

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requirement to bring them up to the recommended daily caloric requirement level besides their per capita income and the relative deficiency among food insecure households is 9.4 percent.

The estimated value of head count, food insecurity gap (short fall) and severity of food insecurity by socio-economic characteristics of household has been analyzed as follows:

TABLE 2: ESTIMATED INDICES OF FOOD INSECURITY BY SOCIO ECONOMIC CHARACTERISTICS OF HOUSEHOLD

Variable	Head count index	Short-fall index	Severity index
Family size			
Small(2-4)	.3132	.0708	.0264
Medium(5-7)	.5350	.1701	.0751
Large(≥ 8)	.8071	.3260	.1627
HH head age			
≤25	.5000	.1551	.0574
26-45	.4955	.1628	.0759
≥46	.6839	.2496	.1175
HH head Sex			
Male	.5645	.2008	.0937
Female	.6176	.2052	.0964
HH head Education			
Literate	.56.62	.1968	.0918
Illiterate	.7368	.2572	.1222
Acc to employment			
Acc to employment	0.5371	0.1868	0.0871
No acc to employment	0.6340	0.2205	0.1034
Access to Credit			
Credit access	.5528	.1998	.0082
No credit access	.5933	.2081	.0924

Source: computed from survey result

The table 2 shows that food insecurity was more severe in the large size household with food insecurity, headcount index, short-fall index and severity as 80.71, 32.6 and 16.27 percents respectively. This fact indicates that food insecurity worsen as household size increased. This increase incidence of food insecurity with increase in family size confirms the prior hypothesis of this study. Food insecurity was high for age group ≥46 years with food insecurity headcount index, short-fall index and severity of 68.39, 24.96 and 11.75 percents respectively. This implies that incidence of food insecurity increased with age of household head in the study area and/or the elder head households live great deprivation than younger head households. Food insecurity was worse in female headed household with food insecurity headcount index, short-fall index and severity of 61.76, 20.52 and 9.64 percents respectively than the male counterpart of 56.45, 20.8 and 9.37 percents. This implies that males are to some extent more engaged in income generating activities than females in the study area. The food insecurity was concentrated in the group with illiterate having an estimated headcount ratio, short-fall index and severity of 73.68, 25.72 and 12.22 percents respectively. This analysis implies that illiterate households are more food insecure than literate ones since literate households are diversifying as well as increasing their means of income in order to drag out of food insecurity situation and lead quality life.

High indices of food insecurity were recorded for households with access to employment than no access to an employment. The estimated food insecurity headcount ratio, short-fall and severity for households without access to employment were 63.4, 22 and 10.3 percents respectively. The food insecurity was more severe in the group with no access to credit service having an estimated headcount ratio, short-fall index and severity of 59.33, 20.8 and 9.2 percents respectively. This indicates that households with access to credit are less food insecure than no access ones.

ECONOMETRIC ANALYSIS

The result of the logistic regression model estimate revealed that out of the 10 factors, 6 variables were found to have a significant influence on the probability of being food insecure. These variables include household size, household head age, household head education, asset possession, access to credit service and access to employment. That means the coefficients of family size and asset possession were statistically significant at 1 percent probability level of significance where as age of household head, access to credit service and access to employment were statistically significant at 5 percent probability level of significance. Furthermore, the coefficient of household head education was significant at 10 percent probability level. The coefficients of 4 explanatory variables namely sex of the household head, dependency ratio, food aid and access to various services were not statistically different from zero at the conventional levels of significance. The code, type, variable description and result obtained from the binary logit model are presented in the table 3 and 4, respectively.

TABLE 3: DESCRIPTION OF VARIABLES INCLUDED IN THE MODEL ESTIMATION

Code	Type	Description
Sizehh	Continuous	Household size in number
Headage	Continuous	Age of household in year
Headsex	Dummy	1, if household head is male,0 otherwise
Dpratio	Continuous	Dependency ratio
Foodaid	Continuous	Food aid
HeadEduc	Dummy	1, if household head is literate, 0 otherwise
Credit	Dummy	1, if household got credit, 0 otherwise
Asset	Continuous	Asset possession
Acemply	Dummy	1, if household has access to employment, 0 otherwise
Accvar	Dummy	1, if household has access to various service, 0 otherwise

Source: author computation

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TABLE 4: BINARY LOGIT RESULT FOR DETERMINANTS OF FOOD INSECURITY

Variables	Coefficient	Stand. Error	p-value	Marginal effect (dy/dx)
Sizehh	.3450141	.0533738	0.000***	.0836052
Headage	.0247641	.0098253	0.012**	.0060009
Headsex	.0844804	.2522869	0.738	.0204138*
Depratio	.211518	.1457525	0.147	.0512559
Foodiad	-.0003625	.000471	0.441	-.0000879
HeadEduc	-.6293699	.3626464	0.083*	-.1555647*
Credit	-1.062744	.4641304	0.022**	-.2251101*
Asset	-.0004323	.0000904	0.000***	-.0001048
Acemply	-.5441445	.239012	0.023**	-.1307246*
Accvaro	-.227023	.2536139	0.371	-.0553279*
-cons	-1.046322	.6996414	0.135	
Log pseudo likelihood =	-226.7324			
Number of obs = 423				
Wald chi2(10) = 69.49				
Prob > chi2 = 0.0000				
Pseudo R2 = 0.3606				
Count R^2 = 95.21				

Source: Model output.

Count R^2 implies prediction success, * dy/dx is for discrete change of dummy variable, *** Significant at the 1% level; **Significant at the 5% level,*significant at 10% level

In light of the above summarized model results possible explanation for each significant independent variable are given consecutively as follows:

Family size: As pinpointed in various literatures, family size is identified as one of the important demographic factors that affect household food insecurity status. In light of this it was hypothesized that family size has positive relationship with food insecurity status of a household, in such a way that households with large family size have better chance of being food insecure than those with small numbers. In this study, the family size was found to be highly significant to determine household food insecurity. The coefficient for family size was found to be positively related with food insecurity and statistically significant at 1 percent probability level. This indicates that larger household size tends to be food insecure compared to smaller family size in the study area. This fully agrees with prior expectation. The marginal effect of family size revealed that the probability of being food insecure will increase by approximately 8.36 percent with one additional family member in adult equivalent. This result is in conformity with the findings of Abebaw (2003) and Frehiwot (2007).

Age of household head: This variable affects food insecurity status positively and significantly at 5 percent probability level in the study area. The positive relationship implies that older age household heads have better chance to be food insecure than younger ones. This is possible because older household heads are less productive and they lead their life by remittance and gifts. They couldn't participate in other income generating activities. On the other hand, older households have large number of families and their resources were distributed among their members. The marginal effect of age of household head indicates that the probability of being food insecure will increase by approximately 0.6% percent when age of the household increase by one year. This result confirms with the findings of Ojogho (2010) and Frehiwot, (2007).

Education level of household head: This variable affects food insecurity situation negatively and significantly at 10 percent probability level. The negative relationship indicates that literate households are less food insecure than illiterate households. The possible explanation is that household head education largely contributed on working efficiency, competency, diversify income, adopting technologies and becoming visionary in creating conducive environment to educate dependants with long term target to ensure better living condition than illiterate ones. This is due to educated household head plays a significant role in shaping household members. Thus, being literate reduces the chance of becoming food insecure in the sample households. The marginal effect of the variable reveals that for literate households the probability of being food insecure decreased by 15.55 percent. The finding of this study was found consistent with what had been found by Aschalew (2006) and Ojogho (2010).

Credit service: The sign of the coefficient of this variable showed a negative relationship with food insecurity and is significant at 5 percent probability level. The negative relationship implies that households with access to credit service have less chance to be food insecure than without access ones. This result is fully in conformity with the prior expectation. This is due to the fact that credit gives the household an opportunity to be involved in income generating activities so that derived revenue increases financial capacity and purchasing power of the household to escape from risk of food insecurity. Moreover, it helps to smooth consumption when household face with temporary food problem. The marginal effect of the variable shows that for households with access to credit the probability of food insecure decrease by 22.51 percent. This result confirms with the findings of Antigen (2010), Tesfaye (2005) and Abebaw (2003).

Asset possession: Ownership of consumer durable and productive asset affects food insecurity status negatively and significantly at 1 percent probability level in the study area. The negative relationship may indicate that in the study area, households who own productive assets like machinery, transportation and etc are less food insecure. This result fully agrees with prior expectation. The marginal effect of asset possession implies that the probability of being food insecure decrease by approximately 0.01 percent as productive asset increase by one unit.

Access to employment: This variable is significant at 5 percent probability level. It has a negative relationship with food insecurity in the study area. The negative relation indicates that households who have access to employment are less likely food insecure than no access one. Access to employment opportunities help to diversify and increase amount of income received by households. The fluctuation in access to employment determines food insecurity of urban households. Marginal effect shows that for households with access to employment the probability of being food insecurity decrease by 13 percent. This result confirms the finding of Maxwell (2000)

CONCLUSIONS

The foregoing analysis attempted to analyze the determinants of urban household food insecurity in Addis Ababa city. First, an attempt has been made to describe the socio-economic characteristics of the food insecure and food secure sample household groups by using descriptive statistics. Second, an attempt has been made to identify factors that determine the urban household food insecurity using binary logit model of regression. Accordingly, in the study area the proportion of people who are unable to fulfill their food energy requirement in the year 2006/07 is 58 percent. The percentage of food consumption needed to bring the entire food insecure population to the food poverty line is 20 percent with 95 percent confidence interval of 17.65 to 22 percent. While the percentage of relative deficiency among food insecure population is 9.4 percent with 95 confidence interval of 8 to 10 percent. The result of the logistic regression model indicated that six out of ten variables namely household size, age of household head, household head education, asset possession, access to credit service, and access to employment were found to be statistically significant as determinants of household food insecurity in the study area. Household size and asset possession were significant at less than one percent probability level while access to credit service, age of household head and access to employment were significant at less than 5 percent probability level. In addition, the household head education was significant at 10 percent probability level. Household size and age of household head were found to be positively related with probability of being food insecure where as access to credit service, asset possession, household head education and access to employment were negatively related with probability of being food insecure.

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RECOMMENDATIONS

The possible areas of intervention that emanate from the results of the research study are presented as follows: As household size and food insecurity are positively related serious attention has to be given to limit the increasing population in the study area. This can be achieved by creating sufficient awareness to effective family planning in the urban households. Further, household heads are advised to reduce the size of their household and their dependency ratio. Age has positive impact on food insecurity. This means older households are more likely to be food insecure. Therefore, capacity building for old household heads should be given. The effect of education on household food insecurity confirms the significant role of the variable in consideration for betterment of living condition. The more household head educated, the higher will be the probability of educating family member and familiar with modern technology, which the twenty first century so badly demands. So, strengthening both formal and informal education and vocational or skill training should be promoted to reduce food insecurity in the study area. Productive assets are highly binding resource in the study area and negatively related with food insecurity. Therefore; development partner support ought to scale up on existing urban cash-based social protection programs to ensure building up of assets for the asset poor households. Access to credit can create an opportunity to be involved in economic activity that generates revenue to households. Development partners operating in the study area should implement provision of credit to eligible households using targeting criterion that reflects actual characteristics of food insecure households. The other pressing issue related to provision of credit is the requirement of collateral and group lending procedure, which discourages so many households. People are afraid of holding accountability for others so individual lending should be considered as another option and collateral requirement should be avoided if there is a need to lift food insecure households from their current situation. Borrowers should be encouraged to save or contribute as matching fund to reach the limited resources over large number of needy people. The access to employment opportunity negatively related with food insecurity in the study area. Access to job helps urban households to diversify their income which in turn alleviates the food deficiency among poor households. Therefore; both government and civil society organizations have roles to play in addressing these issues. The policy initiatives that will do most to enhance the potential for self-employment are basic condition in reducing food insecurity in the city. Here again, certain preconditions apply.

SCOPE FOR FURTHER RESEARCH

This study has attempted to come up with the result of the analysis with defined scope however a lot remained to be unanswered. To provide basic information on the determinants of urban food insecurity, the social, political, natural and environmental dimensions, role of urban agriculture in urban food insecurity, descriptive data on purchasing patterns of food insecure, specific characteristics that make urban poor more vulnerable to food insecurity demands future researchers' attention.

ACKNOWLEDGMENT

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APPENDIX

1: NUTRITIONAL (CALORIE) BASED EQUIVALENCE SCALES

Years of age	Men	Women
0-1	0.33	0.33
1-2	0.46	0.46
2-3	0.54	0.54
3-5	0.62	0.62
5-7	0.74	0.70
7-10	0.84	0.72
10-12	0.88	0.78
12-14	0.96	0.84
14-16	1.06	0.86
16-18	1.14	0.86
18-30	1.04	0.80
30-60	1.00	0.82
60plus	0.84	0.74

Source: calculated from the World Health Organization (1985) by Stefen Dercon, sited in MOFED 2002

2. KILOCALORIE CONVERSION FOR CALCULATING FOOD INSECURITY LINE

No.	Food item	Kcalorie	Median price of food items	Monthly kilocalorie per adult equivalent per kg
1	Cereals	341	4.5	8.545871
2	Pulse	320	7	0.498932
3	Pasta/bread	351	3.5	7.343987
4	Tuber	151	1	1.859594
5	Oil	884	15	0.647204
6	Vegetables	38	1	0.891623
7	Salt	70	1.3	1.211637
8	Sugar	400	7	0.560642
9	Coffee	10	20	0.498932

TABLE 3: BINARY LOGIT OUT PUT LOGISTIC REGRESSION

Number of obs   =   423
Wald chi2(11) =   69.49
Prob > chi2   =   0.0000
Log pseudolikelihood = -226.324
Pseudo R2   =   0.3606

```
-------------------------------------------------------------------------
             |             Robust
 foodline |    Coef.    Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-----------------------------------------------------------
Sizehh |    .3450141   .0533738    6.46   0.000    .2404035    .4496248
headage | .0247641   .0098253    2.52   0.012    .0055069    .0440213
headsex | .0844804   .2522869    0.33   0.738   -.4099929    .5789538
depratio | .211518    .1457525    1.45    0.147   -.0741517    .4971876
foodiad |  -.0003625  .000471   -0.77    0.441   -.0012856    .0005605
headeduc| -.6293699  .3626464  -1.74   0.083   -1.340144    .0814039
credit |   -1.062744  .4641304   -2.29    0.022   -1.972423   -.1530651
Asset |    -.0004323  .0000904   -4.78    0.000   -.0006094   -.0002552
accemply |-.5441445  .239012   -2.28   0.023   -1.012599   -.0756897
accvaro |  -.227023   .2536139   -0.90   0.371   -.7240971    .270051
_cons |    -1.046322  .6996414   -1.50    0.135   -2.417594    .3249497
-------------------------------------------------------------------------
```

TABLE 4: MARGINAL EFFECTS AFTER LOGIT

y = Pr(foodline) (predict)
  = .60636364

```
-------------------------------------------------------------------------
variable |     dy/dx     Std. Err.     z    P>|z|    [  95% C.I.  ]     X
---------+---------------------------------------------------------------
Sizehh |    .0836052    .01271    6.58  0.000  .058696  .108514  6.70922
 headage |   .0060009    .00238    2.52  0.012  .00134  .010662  45.6123
 headsex*|   .0204138    .06076    0.34  0.737  -.098679  .139506  .321513
depratio |   .0512559    .03531    1.45  0.147  -.017947  .120458  .982215
 foodiad |  -.0000879    .00011   -0.77  0.442  -.000312  .000136  93.1775
headeduc|  -.1555647    .0894    -1.74  0.082  -.330788  .019658  .118203
 credit*|  -.2251101    .08007   -2.81  0.005  -.382053  -.068167  .910165
  Asset |  -.0001048    .00002   -4.65  0.000  -.000149  -.000061  1945.3
accemply*|  -.1307246   .05645   -2.32  0.021  -.241371  -.020078  .531915
 accvaro*|  -.0553279    .0621   -0.89  0.373  -.177041  .066385  .321513
-------------------------------------------------------------------------
```

(*) dy/dx is for discrete change of dummy variable from 0 to 1

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PERFORMANCE EVALUATION OF SPECIAL ECONOMIC ZONES IN INDIA

SHAHAZADI BEGUM SHAIK
ASST. PROFESSOR
MBA DEPARTMENT
GVP COLLEGE FOR PG COURSES
VISAKHAPATNAM

R. VIJAYA
DIRECTOR
AQJ CENTRE FOR PG STUDIES
VISAKHAPATNAM

A. NARASIMHA RAO
PROFESSOR
DEPARTMENT OF COMMERCE & MANAGEMENT STUDIES
ANDHRA UNIVERSITY
VISAKHAPATNAM

ABSTRACT

The first Special Economic Zone (SEZ) in India was established in 1965. Four decades later, the SEZ Act was introduced to add impetus and clarity to the concept. The zones, projected as engines of economic growth, were envisioned to boost the export performance of the country apart from creating employment opportunities, generating additional economic activity, and developing infrastructure, among many others. As expected, the policy initiative received a tremendous response, ultimately resulting in the establishment of hundreds of SEZs across the length and breadth of the country, with several more in the pipe line. Over a period of time, the SEZ concept has attracted appreciation as well as criticisms on several fronts from varied quarters. In addition to this, SEZs are a part of a larger and dynamically changing environment. Therefore, it becomes imminent to continuously update and evaluate the performance of these zones. Hence, this paper aims to study the overall performance of Indian SEZs in terms of exports, investment and employment, and assess their contribution to the country's total exports during 2001-2010.

KEYWORDS
SEZ, Performance Evaluation, Exports, NFE, Employment.

INTRODUCTION

SEZs are specific geographical regions that have economic laws different from and more liberal than a country's normal economic laws (Wu, 2009). They can also be considered as industrial zones with special incentives set up to attract foreign investors, in which imported materials or data, undergo some degree of processing before being (re)-exported again (ILO, 2003). More specifically, an SEZ is a fenced-in industrial estate that offers firms, free trade conditions and a liberal regulatory environment and specializes in manufacturing for export (World Bank, 1992).

Of late, SEZs have come to constitute an important aspect of the industrialisation strategy of the developing economies for increasing their competitiveness and international trade flows. They are meant to serve the host nation through export earnings and increased employment opportunities. Further, SEZs are also expected to contribute to the overall development of domestic economy by activating backward and forward linkages and facilitating diversification of the export basket of the host country.

The term 'SEZ' is synonymous with EPZs (Export Processing Zones), FTZs (Free Trade Zones), Maquiladoras, etc., which have been established by countries worldwide to serve as tools for accomplishing different economic purposes and objectives. In India, SEZs were set up with the aim of generating foreign exchange, developing export-oriented industries, stimulating investment and generating employment opportunities besides creating an internationally competitive environment of export production at low cost. The zones were also meant to be safe havens for eliminating constraints imposed by India's trade and industrial policy on exporters.

The first SEZ in India (as well as in Asia) was set up at Kandla in Gujarat in 1965. Thus India became a pioneer among Asian countries to have recognized the effectiveness of the EPZ model in the promotion of exports. This was followed by Santacruz Electronic EPZ (SEEPZ) near Bombay in 1973 followed by the Madras EPZ (now Chennai) in South (1984), Falta EPZ near Kolkata in the East (1984) and Noida EPZ near New Delhi in the North (1984) Cochin EPZ on the West Coast (1984) and Visakhapatnam EPZ on the East Coast (1989).

After 1990s, the liberalization, privatization and globalization (LPG) policies of GOI led to the need for drastic changes in the erstwhile policies relating to industrialization and EPZs. This led to the introduction of SEZ Policy in 2000 to permit the establishment of SEZs in the public, private, joint sector or by the State Governments. This policy also converted the erstwhile established EPZs into SEZs. To encourage private participation the SEZ Act was enforced in 2005 followed by SEZ Rules in 2006 and this resulted in an overwhelming response leading to 600 formal approvals of SEZs in the country. The number of operational SEZs has also gone up from seven in the year 2000 to 111 SEZs in 2010, with the notified SEZs rising to 372 in number.

Ever since their introduction, SEZs have attracted a lot of attention from varied quarters, especially with respect to their performance (Kumar, 1989; Aggarwal, 2004). However, it is identified that little research has been conducted on SEZ performance in India during the period 2000-2010. Incidentally, the aforesaid period has witnessed the most dynamic happenings on the SEZ front (introduction of SEZ Policy in 2000 that led to conversion of EPZs into SEZs, private participation in SEZ establishment, SEZ Act in 2005, SEZ Rules in 2006). It is therefore considered appropriate to evaluate the performance of Indian SEZs (ISEZs) during this period. The objective is to understand the progress made by the zones and the extent of fulfilment of their objectives. The variables of performance chosen for evaluation are exports, employment and investment.

On these aspects, the performance evaluation is carried out under the following heads:
i.   ISEZ Exports Growth during 1965-2010
ii.   Share of ISEZ Exports in India's Total Exports during 2001-2010
iii.   Employment Generation of ISEZs during 1965-2010
iv.   Investment in ISEZs during 2001-2010

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ISEZ EXPORTS GROWTH DURING 1965-2010

From an annual average of ₹ 32.6 lakhs between 1965 and 1970, the ISEZ exports reached an annual average of approximately ₹ 89,000 crores during 2005-2010 (Table- 1). They fared well in comparison with the country's total exports which have grown at a nominal rate. While the country's total exports have registered the highest average annual growth rate of 25 % during the period   1990 – 95, ISEZs have not only maintained a higher average annual growth rate of 27 per cent during the same period, but they have also registered very high growth rates throughout the 45 years of their existence, the highest being in the initial five year period and again during 1975 – 80, following the establishment of SEEPZ SEZ in 1974. The average annual growth rate of ISEZ exports is also commendable at 68 per cent during 2005-10, when the SEZ Act led to the establishment of over 300 SEZs in the country.

The growth in exports has been exceptionally phenomenal after the year 2000 which is evidently due to the establishment of 12 SEZs (in the State Government and private sector) between the years 2000 and 2005 (shown in Table- 1). The years following SEZ Act in 2005 which have witnessed the establishment of many private SEZs in the country, have experienced a considerably high annual growth rate in SEZ exports as well. This is clearly reflected in the year-wise growth in ISEZ exports shown in Table- 2. The highest annual growth rate in ISEZ exports during the period of study has been registered in 2009-10 with a growth of 121 per cent over the previous year. The consistently high export growth rates registered in this period since 2002 can therefore be considered as indicators of SEZ success in India.

SHARE OF ISEZ EXPORTS IN INDIA'S TOTAL EXPORTS DURING 2001-2010

It is a known fact that one of the main objectives behind SEZ establishment is to promote exports. During 2001-2010, the share of ISEZ exports in India's total exports increased considerably from just four percent in 2000 – 01 to 26 percent in 2009-10. As can be observed from Table- 2, the spurt in growth is especially observed during the period after the enforcement of SEZ Act in 2005.

TABLE – 1: ISEZ EXPORTS AND INDIA'S TOTAL EXPORTS DURING 1965 – 2010 (₹ in crores)

Year	Establishment of SEZs in India	Average annual ISEZ exports	Average annual ISEZ export growth rate	Average annual total Indian Exports	Average annual total export growth rate of India
1965–1966 to 1969–1970	Kandla SEZ in 1965	0.3261	94.65 %	1187	12.66 %
1970–1971 to 1974–1975	SEEPZ SEZ in 1974	1.7358	58.34 %	2194	19.2 %
1975–1976 to 1979–1980	Nil	18.6766	79.27 %	5356	14.5 %
1980–1981 to 1984–1985	FSEZ in 1984 MEPZ SEZ in 1984	231.724	57.54 %	8967	12.84 %
1985–1986 to 1989–1990	NSEZ in 1985 CSEZ in 1986 VSEZ in 1989	582.91	27.11 %	17,382	19.76 %
1990–1991 to 1994–1995	Nil	2084.874	27.19 %	56,543	24.66 %
1995–1996 to 1999–2000	Nil	5918.479	21.68 %	1,30,917	14.28 %
2000–2001 to 2004–2005	12 State Government/ Private Sector SEZs set up	11,993.4	22.86 %	2,67,286	19.05 %
2005–2006 to 2009–2010	348 new SEZs notified	88,898.668	67.95 %	6,74,070	18.07 %

Source: www.sezindia.nic.in accessed on 10th September 2010; Aggarwal, (2004); RBI Bulletins

TABLE – 2: SHARE OF ISEZ EXPORTS IN INDIA'S TOTAL EXPORTS AND THEIR GROWTH DURING 2001-2010 (₹ In crores)

Year	India's Total Exports*	ISEZ Exports**	Share of SEZ Exports in India's Total exports (%)	Annual growth rate of India's Total Exports (%)	Annual growth of ISEZ exports (%)
2000 – 01	2,03,571	8552	4.2	27.58[@]	27.48[#]
2001 – 02	2,09,018	9190	4.4	2.68	7.45
2002 – 03	2,55,137	10,057	3.9	22.06	9.44
2003 – 04	2,93,367	13,854	4.7	14.98	37.75
2004 – 05	3,75,340	18,314	4.9	27.94	32.19
2005 – 06	4,56,418	22,840	5	21.6	24.71
2006 – 07	5,71,779	34,615	6.1	25.28	51.55
2007 – 08	6,55,864	66,638	10.2	14.71	92.51
2008 – 09	8,40,755	99,689	11.9	28.19	49.6
2009 – 10	8,45,534	2,20,711	26.1	0.57	121.4

Source: * RBI Bulletins (2006; 2011)

** www.sezindia.nic.in accessed on 10th September, 2010

STATISTICAL APPLICATIONS RELATING TO TABLE- 2

2001- 2010	India's Total Exports	ISEZ Exports
Compound Annual Growth Rate (CAGR)	19.67 %	42.56 %
Coefficient of Variation (CV)	52.47 %	132.4 %
Correlation Coefficient between India's Total Exports and ISEZ Exports= 0.8358		

Source: Calculations based on data available in Table- 2

The erstwhile target of ISEZs contributing five percent share to India's total exports by the end of Eighth Five Year Plan could ultimately be accomplished in 2005 – 06. The SEZ contribution of 26 per cent to the country's overall exports in 2009-10, nourishes the hope of achieving the objectives behind SEZ establishment, especially of contributing significantly to country's total exports.

Even in comparison with India's total exports, ISEZ exports have exhibited a superior growth rate during 2001-10. While the total exports of the country increased 4.15 times from ₹ 2,03,571 crores in 2000-01 to ₹ 8,45,533 crores in 2009-10, thereby registering an annual average growth rate of 18.6 per cent, the ISEZ exports increased more than 25.2 times from ₹ 8552 crores to ₹ 2,20,711 crores during the same period, registering an annual average growth rate of 45.4

[@] This growth rate is calculated by taking India's total exports during 1999-2000, which is ₹1,59,561 crores.
[#] The growth rate is calculated by taking ISEZ exports during 1999-2000, which is ₹ 6709 crores.

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per cent. Except for one year, SEZs have maintained a higher growth rate in exports in comparison with India's total exports during the period of study, with exceptionally high growth rates during the period especially after the enforcement of SEZ Act, 2005. The growth in SEZ exports in comparison with the country's total exports is a positive indicator which can therefore be considered in order to justify the establishment of SEZs in the country.

Further, from the statistical applications relating to Table- 2 it is observed that the Correlation Coefficient between India's total exports and ISEZ exports during 2001-10 is highly positive at 0.8358 indicating a highly positive correlation between the two. Moreover, while the Coefficient of Variation (CV) of the country's total exports works out to be 52.5 per cent the CV of ISEZ exports arrives at 132 per cent thereby indicating the highly positive growth of the latter during the period.

EMPLOYMENT GENERATION OF INDIAN SEZS DURING 1965-2010

In order to evaluate the performance of ISEZs, their total employment since the year of their inception has been considered as it enables a clear picture. From an employment level of 70 persons in 1965, SEZs have reached an employment level of over five lakh persons in 2010 (shown in Table- 3), which is due for further expansion given the number of SEZs that have been approved during 2001-10 by the Government of India. It is worth noting that after the enforcement of SEZ Act in 2005, the new-generation SEZs provided more employment. The total employment in SEZs between the years 2000 and 2006 increased from 81,371 persons to 1, 34,704, thereby registering an increase of 1.6 times. The average zone employment has also increased considerably from just 450 in 1970 to 4537 in 2010. However, the average zone employment decreased in 2006 evidently due to the rise in the number of newly-approved SEZs which was very high compared to operational SEZs.

TABLE – 3: EMPLOYMENT IN INDIAN SEZs DURING 1965-2010

Year[*]	No. of operational SEZs (a)	Total SEZ Employment (persons)(b)	Average SEZ Employment (persons) (c=b/a)
1966	1	70	70
1970	1	450	450
1975	2	1450	725
1980	2	6000	3000
1985	4	16,200	4050
1990	6	35,205	5868
1995	6	61,431	10,239
2000	7	81,371	11,624
2006	19	1,34,704	7090
2010	111	5,03,611	4537

Source: www.sezindia.nic.in (Official website of MOC, GOI) accessed on 24th September, 2010

INVESTMENT IN INDIAN SEZS DURING 2000-2010

Government of India invested a substantial amount in providing physical and trade-related infrastructure and for meeting the development expenditure of the SEZs in the country. The respective State Governments have also earmarked some investment for laying roads in the Zones. Private investment is being increasingly made after the enforcement of SEZ Act in 2005.

At the beginning of the period 2000-2010, the SEZs existing in India belonged only to the Central Government of the country and the cumulative investment which included from all the three parties namely, Central Government, respective State Governments and private firms, amounted to ₹ 2193.9 crores. By the year 2006, the SEZ scenario in the country had changed as 12 new SEZs belonging to State Governments and private entities (both domestic and foreign) had been established between 2000 and 2005. The total investment then had totalled to ₹ 4035.51 crores which included cumulative investment of ₹2279.2 crores in Central Government SEZs and an investment of ₹ 1756.31 crores in the SEZs established by State Governments and private SEZs (see Table- 4).

The investments attracted by SEZs established between the years 2000 and 2005 were of the order of 77 per cent of the total investments made in Central Government SEZs over 40 years (i.e. from the inception of first SEZ in 1965 to 2005). The scenario had turned much more dynamic with the advent of the year 2006 when the Government of India passed the SEZ Act formulated in the previous year and released the SEZ Rules, 2006 to attract large private investments into the arena of SEZs.

As evident from the table, the total investments made in the newly notified SEZs has reached a mammoth figure of ₹ 1, 34,494.76 crores which constitutes more than 90 per cent of the total investment made in all the SEZs in the country as of March 2010. However, the total investments made in all the SEZs in India totalled to ₹ 1, 48,488.62 crores which is incomparable with the corresponding figure just a decade back in March 2000. Quite explicitly, the Central Government SEZs and other Zones established erstwhile also seem to have benefited from the new order, as the investments in these have grown by over three times and four times respectively in a relatively short span of four years.

One may therefore, assess the impact of these investments on the generation of additional economic activity in the country, which is yet another objective outlined by the Government of India in the SEZ Act, 2005. The infusion of industrial dynamism into the country's economy, as anticipated by the planners, appears to be achievable looking at the enthralling investment figures given in the table.

TABLE – 4: INVESTMENT, EXPORTS AND EMPLOYMENT IN INDIAN SEZs DURING 2000 – 2010 (₹ in crores)

Year	Total Investment*	Total Exports	Total Employment (number)
March 2000	2193.9 (2193.9**a**+0**b**+0**c**)	6709	84,545
February 2006	4035.51 (2279.2**a**+1756.31**b**+0**c**)	22,840	1,34,704
March, 2010	1,48,488.6 (6986.95**a**+7006.91**b**+1,34,494.76**c**)	2,20,711.3	5,03,611

Source: www.sezindia.nic.in (Official website of Ministry of Commerce, GOI) accessed on 25th December, 2010.

Note:

* 'a' indicates cumulative investment made in Central Government SEZs established during 1965-1990;

'b' indicates cumulative investment made in State Government and private SEZs established during 2000-2005; and

'c' indicates cumulative investment made in private SEZs notified after Feb, 2006.

STATISTICAL APPLICATIONS RELATING TO TABLE- 4

Variables	Correlation Coefficient
Between Total Investment and Total Exports	0.99839
Between Total Investment and Total Employment	0.99512
Between Total Exports and Total Employment	0.99912

[*] Figures of the year 2006 are, as of 10th February in that year, after which SEZs were notified under the SEZ Act.

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Statistical applications relating to Table – 4 show that a very high correlation exists between any two of the three performance variables viz., Total Investments, Total Exports and Total Employment during the period 2000 – 2010. The correlation coefficient was found to be above 0.995 among the three variables. The inference is quite encouraging as the three variables are closely associated with SEZ growth and are of strategic importance to the country.

CONCLUSION

It is clear from the foregoing analysis that the SEZ Policy which was evolved in the year 2000 led to the establishment of several SEZs in the country. This quantum jump in the number of SEZs resulted in the establishment of hundreds of units within the zones. As a result of this, the exports in this sector grew phenomenally during the period 2001-2010, thereby attempting to accomplish one of the prime objectives behind their establishment. Further, the other associated variables of SEZ performance namely, investment and employment, registered an equally appreciable growth during the given study period. Hence, with respect to the growth in investment, exports and employment, and the number of SEZs established in the country during the study period, it is understood that the SEZ establishment has contributed positively to the nation.

DECLARATION

This article is a part of the Research Thesis submitted to Andhra University for the award of Ph. D. Degree by Shahazadi Begum Shaik under the guidance of Prof. R. Vijaya & Prof. A. Narasimha Rao.

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JOB -STRESS OF FACULTY MEMBERS IN PRIVATE PROFESSIONAL COLLEGES LOCATED IN NCR, DELHI

SWAPAN KUMAR BISHAYEE
PROFESSOR & HEAD
DEPARTMENT OF MANAGEMENT STUDIES
ARYABHATTA COLLEGE OF MANAGEMENT & TECHNOLOGY
CHEEMA

ABSTRACT

Stress has become a major buzzword and legitimate concern of the time. The stress epidemic not only has a deteriorating impact on those affected and their families but is also very costly to organizations. The objectives of this study were to assess the present level of job-stress of Faculty members and the different mechanisms/strategies preferred by them to cope up with it in a survey of 300 Faculty- members working in 30 Private Professional Colleges located in National Capital Region, Delhi. The determinants of job stress that have been studied under this research included 22 different dimensions of job- stress under three Sub-groups of Stressors. The results show that the majority of the Faculty members experienced moderate degree of job- stress.

KEYWORDS

Coping Mechanisms, Faculty members, Job-stress, Private Professional Colleges.

INTRODUCTION

By all definitions, the profession of teaching has a very prestigious place in all professions. A teacher is a kingpin in the entire system of education. Almost all cultures of the civilized world would have considered their teachers in a very high esteem. They are often been given different names like "Master", "Mentor" and "Guru". To achieve this status teachers throughout the history of civilization have always tried to come up to the expectations of the world around them.

Though times have changed and the societies and cultures have drastically diversified, but the task of a teacher remains the same, which is primarily the transfer of knowledge to the next generation. With change in cultural norms and traditions in the societies there has been a drastic change in the expectations from a teacher. Teachings now become a very demanding profession with a lot of stresses. For a teacher who has a lot of deadlines to meet and a lot of responsibilities to shoulder besides teaching what are in the Text Book, the role and responsibility has become multitasked in the present day education system.

With the change in the type of teaching culture and added managerial responsibilities for teachers which include planning and executing instructional lessons, assessing students based on specific objectives derived from a set of curriculum and communicating with parents, teaching has been identified as one of the most stressful profession today.

BACKGROUND OF THE STUDY

If asked to name jobs that are stressful, it is doubtful that the average person would ever think of teaching in Colleges as a stress filled job. Increasingly, however, many Faculty- members are experiencing more job- stress and less job satisfaction. They are exposed to constant stress because they work with specific target audience - students who are pretty difficult to deal with. To cap it all, they have to cope with pressures of parents, students and their Managements. Fighting fires may sound taxing, chasing criminals demanding, but new studies say that working as Teachers also belongs to the category of most stressful jobs. In relation to the profession of teaching, where a teacher is viewed as dispensers of knowledge, teachers are increasingly perceived as facilitators or managers of knowledge.

LITERATURE REVIEW

Stress is currently a phenomenon that must be recognized and addressed in various professions, because of the complexity of present-day society and the teaching profession is no exception. Dr. Hans Selye, who is considered the pioneer of psychological stress (Everley & Rosen feld, 1991:14) cautions that "complete freedom from stress is death". However, various researchers indicate that a definite relation exists between work stress and a person's productivity (Warren & Toll, 1993:11). Too much or too little stress can reduce a person's productivity. Research done worldwide indicates that teachers' stress is becoming endemic (Van Wyk, 1998:3), which could have serious implications for the physical and mental health of teachers. Work demands, pupil misbehavior and negative feedback are the main contributors to teacher stress in Sweden (Jacobsson, Pousette & thylefors, 2001:8). The same applies for Scottish and Australian teachers, according to Pithers (1998:277). He recommended that more stress similarities than differences are found in comparisons of teachers' stress internationality. Statistics (Van Wyk, 1998:5) indicate that teachers hand in more medical insurance claims than persons in other professions, have a four year shorter life expectancy than the national average and often blame stress as reason for sick leave from the Institute. Furthermore, certain kinds of occupations are associated with higher stress levels. Biggs (1988:44) explains that persons in the helping professions are particularly prone to stress, because of their idealistic goals. Feldman (1998:165) lists teaching as one of the more stressful occupations.

Stress as viewed by Ofley (1999) is the psychological, physiological and behavioral response of an individual seeking to adopt and adjust to both the internal and external pressures. Furthermore, Dalloway (2007) describes stress as an automatic physical reaction to danger, demands or threat. Love and Irani (2007) view stress as the individual's inability to cope with excessive workplace demand or job pressure, while Harting et al (2007) presented stress as a process of responding to an imbalance between demand and resources.

Selye, a pioneer in the study of stress, described stress as "the rate at which we live at any moment…….. anything pleasant or unpleasant that speeds up the intensity of life causes a temporary increase in stress (Selye,1974,p.2). " Occupational stress arises from a discrepancy between the teacher's work needs, values and expectations and the failure of the work environment to provide occupational rewards, job demands and the capacity of the worker to meet these requirements"(Cooper,1981,p.175). Hunter wrote "air traffic control, surgery and teaching are probably three of the most potentially stressful occupations in the world……. In them people are responsible for functioning in learned patterns yet must also possess on-their-feet, high-speed thinking and decision-making skills to handle the unexpected situations triggered by variance of humans and the caprice of nature"(Hunter,1977,p.122).

The implication of the above definitions is that too much pressures can be placed upon teachers arising from unnecessary deadlines, attempts to impress boss /Employer, administrative tasks, conflicts ,implementation of new policy ,lack of breathing space between classes, non-availability of time to relax and recapture, aspirations for greater achievement, overwork, emotional exhaustion, lack of participation in decision making process ,poor communication, job insecurity, dealing with different needs of the students etc.

RESEARCH OBJECTIVES

1. To assess the general level of Stress among the Faculty members of Private Professional Colleges.
2. To assess the degree of job-stress against different dimensions of job-related stressors.
3. To identify the degree of importance of different mechanisms/strategies preferred by the Faculty members to reduce/cope up with the job-stress.

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RESEARCH METHODS

A survey instrument in the form of close-ended questionnaire was developed for the purpose of collecting the data for the study. Multiple modes of communication such as e-mail, post and in-person were used in order to get optimal response from the study participants. Of 300 distributed questionnaires, overall usable response rate was 63.33(190) %.

The participants were 36 % Female and 64 % Male, 39 % of them were married and 61% single.

TABLE A: JOB STRESS

Sl.No.	Questions	N	YES(1)		NO(2)		
			No.	%	No.	%	
1	Do you perform well under Stress?	190	66	34.73	124	65.27	
2	Are you comfortable at your present level of Stress?	190	77	40.52	113	59.48	
3	Do you feel that there are negative changes in your behaviour at home, caused by job related Stress?	190	115	60.53	75	39.47	
4	Have you ever felt that you have neglected your family/friends due to work pressure?	190	101	53.16	89	46.84	
5	Do you feel tiered and fatigued even with enough sleep?	190	82	43.16	108	56.84	
6	If you feel you are under stress, which you feel the main contributory factor?	190	122	64.21	68	35.79	
	Problems at Work-place(1)/Problems at Home(2)						
7	What do you feel about working on Holidays/Weekdays? Good(1) / Bad(2)	190	50	23.62	140	73.68	
8	Rate your present level of Stress on average High(1)/Moderate(2)/Low(3)	190	57	30.00	92	48.42	41/21.58
9	How do you feel at your present level of your Stress? Good(1)/ Bad(2)	190	63	33.15	127	66.85	

TABLE B: PRESENT LEVEL OF JOB STRESS OF FACULTY MEMBERS ON DIFFERENT JOB-RELATED VARIABLES

Sl.No.	Job -related Variables	N	Low		Moderate		High		MEAN	SD	DEGREE
A	**Extra-Organizational Stressors**		No.	%	No.	%	No.	%			
1	Family related problems	190	91	47.89	63	33.16	36	18.95	2.53	1.229	Moderate
2	Problems arising out of relocation	190	44	23.16	76	40.00	70	36.84	3.24	1.223	Moderate
3	Residence related problems	190	115	60.53	43	22.63	32	16.84	2.35	1.202	**Low**
4	Finance related problems	190	59	31.05	64	33.68	67	35.26	3.05	1.314	Moderate
5	Transportation related problems	190	18	9.47	79	41.58	93	48.95	3.57	1.051	**High**
B	**Organizational Stressors:**										
1	Strict management control	190	31	16.32	101	53.16	58	30.53	3.23	1.093	Moderate
2	Role conflict and ambiguity	190	129	67.89	40	21.05	21	11.05	2.16	1.089	Moderate
3	Changes in subject taught/allocated	190	44	23.16	85	44.74	61	32.11	3.13	1.140	Moderate
4	Additional responsibilities(Academic/Non-academic	190	81	42.63	77	40.53	32	16.84	2.67	1.173	Moderate
5	Work Assignment and Workload	190	65	34.21	82	43.16	32	16.84	2.86	1.193	Moderate
6	Inadequate/ insufficient infrastructure	190	74	38.95	92	48.42	24	12.63	2.60	1.102	Moderate
7	Rules/Regulations/Policies of the Organization	190	65	34.21	52	27.37	73	38.42	3.01	1.369	Moderate
8	Providing cover for teacher shortages on absences	190	115	60.53	54	28.42	21	11.05	2.29	1.111	**Low**
9	Insecure job climate	190	36	18.95	63	33.16	91	50.00	3.41	1.208	Moderate
10	Faculty Performance Appraisal	190	91	47.89	61	32.11	38	20.00	2.63	1.235	Moderate
11	Poor HR Policy	190	75	39.47	69	36.32	46	24.10	2.81	1.241	Moderate
C	**Individual Stressors:**										
1	Long hours of work	190	90	47.37	60	31.58	44	23.16	2.58	1.256	Moderate
2	High degree of resistance towards changes	190	105	55.26	49	25.79	36	18.95	2.43	1.294	**Low**
3	Little control over the work-environment and on the job	190	97	51.10	60	31.58	33	17.37	2.47	1.233	**Low**
4	Constant pressure on deadlines and schedules	190	56	29.47	79	41.58	55	28.95	2.98	1.161	Moderate
5	Maintaining discipline in the Class Rooms	190	85	44.74	37	20.53	21	11.10	2.51	1.053	Moderate
6	Time constraints	190	79	41.58	65	34.21	46	24.21	2.75	1.233	Moderate

Note: Mean – 1.00 – 2.49 means the Faculty members have LOW LEVEL of Job Stress. Mean 2.50 3.49 means the Faculty members have MODERATE LEVEL of Job Stress. Mean 3.50 – 5.00 means the Faculty members have HIGH LEVEL of Job Stress.

TABLE C: DEGREE OF IMPORTANCE OF STRATEGIES TO REDUCE JOB STRESS

	Job -related Variables	N	Low		Moderate		High		MEAN	SD	DEGREE
A	**Organizational Strategies / Steps**		No.	%	No.	%	No.	%			
1	Organizing stress-coping programmes/Work-shops	190	26	13.68	87	45.79	77	40.53	3.43	1.109	Moderate
2	Involving Faculty members in decision making process	190	15	7.89	51	26.84	124	65.26	3.88	1.034	**High**
3	Faculty Development Programme	190	53	27.89	79	41.58	58	30.52	3.06	1.174	Moderate
4	Supportive Organizational Climate	190	34	17.89	108	56.84	48	25.26	3.11	0.997	Moderate
5	Improving Communication Channel	190	47	24.74	95	50.00	48	25.26	2.98	1.066	Moderate
6	Encouraging Faculty members to express their ideas	190	36	18.95	43	22.63	111	58.42	3.61	1.296	**High**
7	Sound HR Policies	190	21	11.05	78	41.05	91	47.89	3.55	1.134	**High**
B	**Individual Strategies / Steps**										
1	Exercise / Yoga	190	21	11.05	120	63.16	49	25.79	3.24	0.966	Moderate
2	Meditation	190	27	14.21	108	56.84	55	28.95	3.27	1.052	Moderate
3	Avoiding Confrontation	190	19	10.00	54	28.43	117	61.58	3.77	1.072	**High**
4	Discussing problems/expressing feelings to others	190	36	18.95	99	52.11	55	28.95	3.15	1.112	Moderate
5	Plan Ahead and Prioritize	190	27	14.21	69	36.32	94	52.11	3.55	1.148	**High**
6	Have a Healthy Home life	190	64	33.68	75	39.47	51	26.84	2.92	1.227	Moderate
7	Develop and maintain a positive attitude	190	36	18.95	82	43.16	72	37.89	3.26	1.152	Moderate
8	Do something nice for some one	190	79	41.58	61	32.11	50	26.32	2.78	1.290	Moderate
9	Read interesting Literature	190	97	51.05	56	29.47	41	21.58	2.56	1.282	Moderate
10	Watch a favourite Movie	190	98	51.58	50	26.32	42	22.11	2.57	1.196	Moderate
11	Listening Music	190	116	61.05	42	22.11	32	16.84	2.31	1.200	**Low**
12	Create support net work of friendship and co-workers	190	39	20.53	89	46.84	62	32.63	3.17	1.037	Moderate
13	Have realistic expectation	190	52	27.37	59	31.05	79	41.58	3.25	1.284	Moderate

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RESEARCH RESULTS

Table A Data showed that the respondents presently experienced 30.00 %High level of Stress,48.42 % Moderate level of Stress and S 21.58 % Low level of Stress. From the analysis of the data it was also clear that most of the Faculty members do experience Stress and experience the negative impact of it both in the family and work life.

Table B Data indicated that the respondents expressed High level of Stress on "Transport related problem" (Mean-3.57) followed by "Problems arise out of relocation" (Mean - 3.24) in the Extra Organizational Stressors Category. In the Organizational Stressors Category, the High Stress occurred in "Insecure Job Climate"(Mean – 3.41) followed by "Strict Management Control" (Mean – 3.23) and "Changes in Subject Taught/Allocated"(Mean – 3.13), while the Lowest Stress happened to be "Role Conflict and Ambiguity"(Mean – 2.16) followed by "Providing cover for Faculty Shortages on Absence"(Mean- 2.29). Faculty members felt moderate level of Stress on descending order like "Rules/Regulations/Policies of the Organisation"(Mean- 3.01) , "Work Assignment an& Workload"(Mean – 2.86),"Poor HR Policy"(Mean - 2.81), "Additional Responsibilities"(Mean – 2.67)) and "Faculty Performance Appraisal"(Mean – 2.63).In the Individual Stressors Category the highest Stressors were "Constant pressure on Deadlines and Schedules(Mean – 2.98) followed by "Time Constraints"(Mean – 2.75).

Table C Data revealed that Faculty members were of the opinion –"Involving Faculty members in decision making process"(Mean- 3.88) was the most important step/strategy to be undertaken by the Management in reducing the Stress Level followed by "Encouraging Faculty members to express their ideas"(Mean – 3.61) and "Sound HR Policies"(Mean – 3.55) . The strategies to be adopted on individual basis, the highest degree of importance in reducing the stress Level was "Avoiding Confrontation" (Mean -3.77) followed by "Plan Ahead and Prioritize"(Mean -3.55).

CONCLUSIONS

Stress is a fact of life, but it need not be a way of life. Every job has stress. It is an inevitable consequence of living and working with others. We don't always have control over what happens to us, says Allen Elkin, Director of the Stress Management Counseling Center in New York City, and yet that does not mean we have to react to a difficult, challenging situation by becoming frazzled or feeling overwhelmed or distraught. Being overly anxious is not just a mental hazard; it is a physical one too. The more stressed out we are the more vulnerable we are to a host of chronic or life-threatening illness and less open to the beauty and pleasure of life.

Some amount of stress may be normal as well as beneficial. Too much stress, however, has negative effects. Negative stressors can lead to adverse physical, psychological, and/or behavioral consequences. Moreover, the education system can be negatively affected by poor teacher performance; absenteeism and turnover rates (West and West, 1989-47).If teachers' stress is not minimized or unresolved, it will directly or indirectly have ripple effects on the teachers' emotional, mental and physical health which may have negative effects in teaching and learning process. Obviously, when teachers are stressed, education system will be impaired, thus inefficiency may ensue. Academic Administrators, primarily the HR Managers, should adopt effective strategies to reduce the harmful effects while retaining the energy and creativity needed to work and live in a stressful environment.

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ARBITRAGE PRICING THEORY TESTED IN INDIAN STOCK MARKET

DR. BAL KRISHAN
PROFESSOR
DEPARTMENT OF COMMERCE
HIMACHAL PRADESH UNIVERSITY
SHIMLA

DR. REKHA GUPTA
ASST. PROFESSOR
GOVERNMENT P. G. COLLEGE
UNA

ABSTRACT

In this paper Arbitrage pricing theory are tested in Indian stock market. Two steps used in this study are time series regression and multiple regression analysis (Stepwise estimation). This study supports the applicability of Arbitrage Pricing Theory in Indian Stock Market. There is more than one factor which influences the security returns, instead of one as indicated by CAPM. In different years, different factors influence rate of return of securities and portfolios. In 1998-99 S&P CNX Nifty, in 1999-00 all factors, in 2000-01 S&P CNX Nifty, in 2001-02 S&P CNX Nifty and IIP, in 2002-03 IIP, S&P CNX Nifty, GDP and PLR, in 2003-04 GDP, IIP and PLR, in 2004-05 S&P CNX Nifty, IIP and WPI, in 2005-06 WPI, PLR, S&P CNX Nifty and IIP, in 2006-07 S&P CNX Nifty and in 2007-08 S&P CNX Nifty and PLR are affecting on returns of securities listed in NSE. But for portfolios in 1998-99 S&P CNX Nifty, in 1999-00 S&P CNX Nifty, GDP, IIP and WPI, in 2000-01 S&P CNX Nifty, IIP and WPI, in 2001-02 all factors, in 2002-03 IIP, S&P CNX Nifty and GDP , in 2003-04 S&P CNX Nifty GDP, WPI and PLR, in 2004-05 no factors, in 2005-06 WPI, PLR, S&P CNX Nifty and IIP, in 2006-07 S&P CNX Nifty and PLR and in 2007-08 S&P CNX Nifty, GDP and PLR factors affect the stock price. These studies recommend the investors to analyze all factors for investing rather than one factor.

KEYWORDS
arbitrage pricing theory, stock market.

INTRODUCTION

inancial asset pricing models are usually divided over two fundamental issues. They are respectively what constitutes and how risk affects security returns. While the CAPM is a simple model that is based on sound reasoning, some of the assumptions that underlie the model are unrealistic. Some extensions of the basic CAPM were proposed that relaxed one or more of these assumptions. Instead of simply extending an existing theory, Ross (1976) addresses this concern by developing a completely different model: the Arbitrage Pricing Theory (APT). Unlike the CAPM, which is a model of financial market equilibrium, the APT starts with the premise that arbitrage opportunities should not be present in efficient financial markets. This assumption is much less restrictive than those required to derive the CAPM.

For instance, the CAPM model was structured on the belief that relevant risk measure is related to just one aspect of the macro economy such as security's return is a function of return on a market index. However, in attempting to accurately estimate expected return, variance and covariance for securities, multiple-factor model are potentially more useful than the CAPM. The health of the economy affects most companies. Thus change in expectations concerning the future of the economy will generally have profound effects on the returns of most securities. Given the belief that there is more than one factor, a goal of security analysis is to identify these factors in the economy and the sensitivities of security returns to movement in these factors. APT holds that the expected return of a financial asset can be modeled as a linear function of various macro-economic factors or theoretical market indices, where sensitivity to changes in each factor is represented by a factor-specific beta coefficient. The model-derived rate of return will then be used to price the asset correctly - the asset price should equal the expected end of period price discounted at the rate implied by model. If the price diverges, arbitrage should bring it back into line.

The theory does not specify how large the number is, nor does it identify the factors. It simply assumes that these n factors cause returns to vary together. There may be other, firm-specific reasons for returns to differ from their expected values, but these firm-specific deviations are not related across stocks. Since the firm-specific deviations are not related to one another, all return variation not related to the n common factors can be diversified away. Based on these assumptions, Ross shows that, in order to prevent arbitrage, an asset's expected return must be a linear function of its sensitivity to the n common factors. Thus the returns for any asset i are assumed to be generated as:

$$R_i = E(R_i) + \beta_{i1}F_1 + \beta_{i2}F_2 + ---- \beta_{in}F_n + e_i$$

where:
$E(R_i)$ *is the risky asset's expected return*;
RP_K *is the risk premium of the factor*;
R_f *is the risk free rate*;
P_k *is the macroeconomic factor*;
β_{ik} *is the sensitivity of the asset to factor k, also called factor loading*; *and*
e_i *is the risky asset's idiosyncratic random shock with mean zero*.

A major turning point in empirical tests of the CAPM was the devastating **Roll (1977)** critique. Previous tests of the CAPM examine the relationship between equity returns and beta measured relative to a broad equity market index such as the S&P500. However, Roll demonstrates that the market, as defined in the theoretical CAPM, is not a single equity market, but an index of all wealth. The market index must include bonds, property, foreign assets, human capital and anything else, tangible or intangible that adds to the wealth of mankind. Roll points out that *"the portfolio used by Black, Jensen and Scholes was certainly not the true portfolio"*. Moreover, Roll shows that unless these market portfolios were known with certainty then the CAPM never could be tested. Finally, Roll argues that tests of the CAPM are at best tests of the mean-variance efficiency of the portfolio that is taken as the market proxy. But within any sample, there will always be a portfolio that is mean-variance efficient; hence finding evidence against the efficiency of a given portfolio tells us nothing about whether or not the CAPM is correct. **Vipul and Gianchandani (1997)** investigate the relevance of Arbitrage Pricing Theory (APT) in the Indian context. Five macroeconomic variable namely wholesale price index, dollar- rupee conversion rate, call money rate, price of gold and BSE national index have been selected to represent factors. A two stage regression analysis indicates that the market 'value' national index (NI) and dollar rupee conversion rate (FEDAI) in determining the prices of the scrip in Multiple index Model (MIM). However, after second stage none of the risk premium is found to be significant, indicating that none of the variables is valued by the market as predicted by APT. Focusing on asset returns governed by a facture structure, the APT is a one-period model, in which preclusion of arbitrage over static portfolios of these assets leads to a linear relation between the expected return and its covariance with the factors. The APT, however, does not preclude arbitrage over dynamic portfolios. Consequently, applying the model to evaluate managed portfolios contradicts the no- arbitrage spirit of the

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model. **Huberman and Wang (2005)** conclude that an empirical test of the APT entails a procedure to identify features of the underlying factor structure rather than merely a collection of mean-variance efficient factor portfolios that satisfies the linear relation.

The APT differs from the CAPM in that it is less restrictive in its assumptions. It assumes that each investor will hold a unique portfolio with its own particular array of betas, as opposed to the identical "market portfolio". In some ways, the CAPM can be considered a "special case" of the APT in that the securities market line represents a single-factor model of the asset price, where beta is exposed to changes in value of the market.

DATA

The core object of this study is to test the APT in Indian stock market. For this purpose, daily data of 291 companies are collected. The daily price is computed by taking average of highest and lowest price in a day. Daily changes in value are worked out for five macroeconomic factors GDP, PLR, WPI, IIP and NSE for period April 1998 to March 2008. The data are collected from RBI Bulletin, RBI Annual report and NSE website nseindia.com.

MACROECONOMIC VARIABLES

However, APT does not specify as to what these factors could be. The following macroeconomic variables are selected for the purpose of the study:

* The growth rate of gross domestic product (GDP).
* The level of interest rates on short-term treasury securities such as prime lending rate (PLR).
* The wholesale price index for inflation rate (WPI).
* The index of industrial production (IIP).
* The S&P CNX Nifty (NSE).

Gross domestic production and index of industrial production are associated with aggregate economic activity. It is often assumed that these factors have positive effect on return of securities. So, both factors are considered for testing the APT. Almost all studies on APT considered price as one of the factor. Therefore, it is assumed that increase in price level leads to fall in demand, which results the fall in stock prices i.e. stock price index levels are related negatively. Interest rates are also included in various studies related to APT. In this study prime lending rate are to be used. It is assumed that there is negative relation between interest rate and stock prices.

PORTFOLIO CREATION

In 1997-98, the values of return are arranged in descending order for making portfolios. A portfolio of five securities has been made with equal weight; subsequent portfolios are made with leaving the highest return security and adding the next lowest return security. In portfolios the numbers of securities are remained same for rest of time period. The returns of 286 portfolios are measured with averaging the returns of five securities under one year gap.

METHODOLOGY

Following steps and methods are applied for this study:

* **Average share price** of each company is obtained as:

$$Share\ price = \frac{P_H + P_L}{2}$$
$$where:$$

$$P_H = Highest\ market\ price\ during\ the\ day; and$$

$$P_l = Lowest\ market\ price\ during\ the\ day.$$

* The **daily return** of the S&P CNX Nifty and companies are calculated as:

$$R_t = \frac{(P_i - P_{i-1}) * 100}{P_{i-1}}$$
$$where:$$
$$R_t\ is\ the\ rate\ of\ return\ for\ the\ period\ t; and$$
$$P_i\ and\ P_{i-1}\ are\ the\ price\ of\ two\ successive\ periods\ t\ and\ t-1.$$

* Thus, time series regressions are used to estimate beta under different time gaps for different factors with securities and portfolios.

$$R_i = \alpha_i + \beta_i R_m + \varepsilon_i$$
$$where:$$
$$R_i\ is\ the\ expected\ return\ on\ portfolio;$$
$$\alpha_i\ is\ intercept\ on\ y-axis;$$
$$\beta_i\ is\ the\ slope\ of\ a\ straight\ line;$$
$$R_m\ is\ expected\ market\ return; and$$
$$\varepsilon_i\ is\ random\ error\ term\ with\ mean\ zero.$$

* **Partial correlation** measures the degree of association between two random variables, which the effect of a set of controlling random variables removed. The partial correlation between **X** and **Y** given a set of **n** controlling variables Z_i, written $p_{xy.z}$, is the correlation between the residuals Rx and Ry resulting from the linear regression of **x** with **z** and of **y** with **z**. For solving the linear regression problem amounts to finding:

$$w_x^* = \frac{argmin}{w} \left\{ \sum_{i=1}^{N} (x_i - (w, z_i))^2 \right\}$$

$$w_y^* = \frac{argmin}{w} \left\{ \sum_{i=1}^{N} (y_i - (w, z_i))^2 \right\}$$

With **N** being the number of samples and (**v,w**) the scalar product between the vectors **v** and **w**. the residuals are then

$$r_{x,i} = x_i - (w_x^*, z_i)$$
$$r_{y,i} = y_i - (w_y^*, z_i)$$

And the partial correlation is:

$$\hat{p}_{xy.z} = \frac{N \sum_{I=1}^{N} r_{x,i} r_{y,i} - \sum_{I=1}^{N} r_{x,i} \sum r_{y,i}}{\sqrt{N \sum_{i=1}^{N} r_{x,i}^2 - (\sum_{i=1}^{N} r_{x,i})^2} \sqrt{N \sum_{i=1}^{N} r_{y,i}^2 - (\sum_{i=1}^{N} r_{y,i})^2}}$$

* **Independent t test** is tested whether mean differences of different factors are significant or not. To carry out the test, it calculates the statistic as follows:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S} * \sqrt{\frac{n_1 n_2}{n_1 + n_2}}$$

$$S = \sqrt{\frac{\sum (X_1 - \overline{X}_1)^2 + \sum (X_2 - \overline{X}_2)^2}{n_1 + n_2 - 2}}$$
$$where:$$

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$\bar{X}_1$ *is the mean of first sample*;
$\bar{X}_2$ *is the mean of second sample*;
n_1 *is the number of observations in the first sample*;
n_2 *is the number of observations in the second sample*; *and*
S is the combined standard deviation.

- **Multiple regression** analysis is a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables. The object of multiple regression analysis is to use the independent variable whose values are known to predict the single dependent value. The generalized equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \ldots \ldots + \beta_n X_n + \varepsilon$$

where:

$\beta_0 = a\ constant, the\ value\ of\ Y\ when\ all\ X\ values\ are\ zero$;
$\beta_1 = the\ slope\ of\ the\ regression\ surface$; *and*
$\varepsilon = an\ error\ term, normally\ distributed\ about\ a\ mean\ of\ 0$.

- **Stepwise estimation** is used for selecting variables for inclusion in the regression model that starts by selecting the best predictor of the dependent variable. Additional independent variables are selected in terms of the incremental explanatory power. Independent variables are added as long as their partial correlation coefficients are statistically significant. Independent variables may also be dropped if their predictive power drops to a no significant level when another independent variable added to the model. This method is also helpful in identifying collinearity is an examination of the correlation matrix for the independent variables. The two most common measures for assessing both pair wise and multiple variables collinearity are tolerance and its inverse, the variance inflation factor. A direct measure of multicollinearity is tolerance, which is defined as the amount of variability of the selected independent variable not explained by the other independent variables. The tolerance value should be high, which means a small degree of multicollinearity. A second measure of multicollinearity is the variance inflation factor (VIF), which is calculated simply as the inverse of the tolerance value. Thus, instances of higher degrees of multicollinearity are reflected in lower tolerance values and higher VIF values.

EMPIRICAL FINDINGS

Appendix-I presents the value of factors for different time periods. Multiple steps are involved in case of empirical testing on APT. In first step, daily changes in different factors are identified. Thereafter, time series regressions are run for each stock and portfolios to estimates the beta with various factors. In this case return on securities or portfolios are taken as dependent variable. After the time series regression, a second pass cross sectional regression is used to measure the relation between average rate of returns and factor betas from individual securities and portfolios.

Thus, the series regression runs 14335 times and 14300 times for estimating the beta related to different factors in case of securities and portfolios. After the time series regression, multiple regression analysis is used. In first step the partial correlation is calculated. Partial correlation coefficient is the correlation of an independent and dependent variable when the effects of other independent variables have been removed. Partial correlations are shown in appendix- II for securities and portfolios. Then stepwise estimation are used, it maximize the incremental explained factor at each step. In this estimation, p value is identified against the t statistic. P value of different factors are depicts in appendix-III for securities and portfolios from 1998-99 to 2007-08. It is helpful to determine the factor added in the equation. In each step, add the factor in equation which has highest partial correlation and whose t value is statistically significant.

It can be seen from appendix- IV and appendix- V that in each step R^2 and adjusted R^2 are increased with increasing number of factors in the equation. However standard error decreases and multicollinearity becomes minimum. In different years different factors influence the rate of return of securities and portfolios. These factors are shown in appendix- IV for securities. It can be seen from appendix- IV that S&P CNX Nifty has effect on all the years, index of industrial production has also effect on all the years except 2000-01, 2006-07 and 2007-08. However, prime lending rate affects return of securities in 1999-00, 2002-03, 2003-04, 2005-06 and 2007-08. Gross domestic production affected the returns only in 1999-00, 2002-03, and 2003-04.

Factors effect on portfolios are depicts in appendix- V which shows that in 2004-05 the returns of companies does not affected by any factors, remaining years influenced by S&P CNX Nifty . Hence, 1999-00, 2001-02, 2002-03, 2003-04 and 2007-08 are affected by gross domestic production. The effect of prime lending rate is visible after year 2002-03 (except in 2004-05). The wholesale price index influences the prices only in 2000-01, 2001-02, 2003-04 and 2005-06. Also, in 2000-01, 2001-02, 2002-03 and 2005-06 prices are affected by index of industrial production. However, factors seemed to be significant after completing different stages. It reveals that many factors influence the prices of securities and portfolios, so results interpret that Arbitrage pricing theory is suitable for Indian stock market.

CONCLUSION

A large amount of work has been done on Arbitrage pricing theory. Although most of the researchers favor this theory, some have rejected the applicability of this theory. It may be because of factors like less number of securities included, short time period selected, less number of risk factors selected etc. Present study overcomes all these limitation. For testing the Arbitrage pricing theory, five factors are chosen such as Gross Domestic Production, Index of industrial Production, Prime Lending Rate and Wholesale Price Index. This study supports the applicability of Arbitrage Pricing Theory in Indian Stock Market. There is more than one factor which influences the security returns.

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APPENDIX

APPENDIX-I: FACTOR AFFECTING STOCK PRICES

Years	GDP (Rs in Crores)	% Change in GDP	Per Day Change in GDP	IIP	% Change in IIP	Per Day Change in IIP	WPI	% Change in WPI	Per Day Change in WPI	PLR	% Change in PLR	Per Day Change in PLR
1997-98	1012816			139			133			14.00		
1998-99	1081834	6.814	0.0187	144	3.810	0.0104	141	5.949	0.0163	12.50	-10.714	-0.0294
1999-00	1151991	6.485	0.0178	156	8.172	0.0224	145	3.269	0.0090	12.25	-2.000	-0.0055
2000-01	1193922	3.640	0.0100	163	4.161	0.0114	156	7.158	0.0196	11.50	-6.122	-0.0168
2001-02	1267833	6.191	0.0170	167	2.643	0.0072	161	3.597	0.0099	11.50	0.000	0.0000
2002-03	1318321	3.982	0.0109	177	5.749	0.0157	167	3.410	0.0093	11.13	-3.261	-0.0089
2003-04	2226041	68.854	0.1886	189	7.022	0.0192	176	5.456	0.0149	10.63	-4.494	-0.0123
2004-05	2393671	7.530	0.0206	205	8.360	0.0229	222	25.924	0.0710	10.50	-1.176	-0.0032
2005-06	2612847	9.156	0.0251	222	8.154	0.0223	196	-11.693	-0.032	10.50	0.000	0.0000
2006-07	2804310	7.328	0.0201	247	11.558	0.0317	206	5.368	0.0147	12.38	17.857	0.0489
2007-08	3122862	11.359	0.0311	268	8.458	0.0232	216	4.755	0.0130	12.50	1.010	0.0028

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APPENDIX –II: ZERO-ORDER PARTIAL CORRELATION OF SECURITIES AND PORTFOLIOS

1998-99	NSE	GDP	IIP	WPI	PLR	RETURN	1998-99	NSE	GDP	IIP	WPI	PLR	RETURN
	1						**PARTIAL CORRELATION OF 286 PORTFOLIOS**						
NSE	1.000						NSE	1.000					
GDP	-.019	1.000					GDP	.090	1.000				
IIP	.134*	-.345**	1.000				IIP	-.051	-.259**	1.000			
WPI	.003	-.135*	.208**	1.000			WPI	.015	-.135*	.181**	1.000		
PLR	-.012	-.095	.270**	.310**	1.000		PLR	.075	-.139*	.448**	.250**	1.000	
RETURN	-.329**	-.098	.101	-.003	-.055	1.000	RETURN	-.581**	-.029	-.056	-.010	-.117*	1.000
1999-00	NSE	GDP	IIP	WPI	PLR	RETURN	1999-00	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	-.206**	1.000					GDP	-.384**	1.000				
IIP	-.386**	-.703**	1.000				IIP	-.460**	-.474**	1.000			
WPI	.036	.905**	-.791**	1.000			WPI	-.056	.839**	-.624**	1.000		
PLR	-.026	-.793**	.786**	-.656**	1.000		PLR	-.011	-.617**	.656**	-.389**	1.000	
RETURN	-.758**	.469**	.230**	.173**	-.163**	1.000	RETURN	-.828**	.610**	.344**	.243**	-.160**	1.000
2000-01	NSE	GDP	IIP	WPI	PLR	RETURN	2000-01	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	.388**	1.000					GDP	.531**	1.000				
IIP	-.216**	-.978**	1.000				IIP	-.364**	-.981**	1.000			
WPI	-.111	-.956**	.993**	1.000			WPI	-.277**	-.960**	.995**	1.000		
PLR	.111	.957**	-.993**	-.999**	1.000		PLR	.274**	.960**	-.995**	-.999**	1.000	
RETURN	-1.000**	-.388**	.217**	.111	-.111	1.000	RETURN	-1.000**	-.531**	.365**	.277**	-.274**	1.000
2001-02	NSE	GDP	IIP	WPI	PLR	RETURN	2001-02	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	-.116*	1.000					GDP	-.192**	1.000				
IIP	-.141*	.000	1.000				IIP	-.099	.244**	1.000			
WPI	-.027	.008	-.002	1.000			WPI	-.255**	-.160**	.278**	1.000		
PLR	.003	-.121*	-.005	-.026	1.000		PLR	-.076	-.062	.152*	.100	1.000	
RETURN	.621**	-.072	.184**	-.017	-.007	1.000	RETURN	.534**	-.185**	.058	-.279**	-.125*	1.000
2002-03	NSE	GDP	IIP	WPI	PLR	RETURN	2002-03	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	.202**	1.000					GDP	.057	1.000				
IIP	.519**	-.196**	1.000				IIP	.312**	-.339**	1.000			
WPI	.034	-.044	-.051	1.000			WPI	.017	.078	-.075	1.000		
PLR	-.110	.019	-.090	.486**	1.000		PLR	-.124*	.078	-.105	.422**	1.000	
RETURN	-.622**	-.228**	-.649**	-.004	-.020	1.000	RETURN	-.366**	-.112	-.559**	.046	-.014	1.000
2003-04	NSE	GDP	IIP	WPI	PLR	RETURN	2003-04	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	.670**	1.000					GDP	.760**	1.000				
IIP	.451**	.417**	1.000				IIP	.433**	.347**	1.000			
WPI	.003	-.026	.234**	1.000			WPI	-.002	-.033	.375**	1.000		
PLR	.002	.000	.332**	.402**	1.000		PLR	-.013	.006	.342**	.304**	1.000	
RETURN	-.385**	-.459**	-.296**	.062	.089	1.000	RETURN	-.163**	-.199**	-.056	.123*	.101	1.000
2004-05	NSE	GDP	IIP	WPI	PLR	RETURN	2004-05	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	-.118*	1.000					GDP	-.129*	1.000				
IIP	.270**	-.610**	1.000				IIP	.193**	-.692**	1.000			
WPI	-.028	.597**	-.757**	1.000			WPI	.078	.600**	-.750**	1.000		
PLR	-.010	-.341**	.493**	-.773**	1.000		PLR	-.082	-.448**	.596**	-.814**	1.000	
RETURN	-.862**	.143**	-.282**	.019	.002	1.000	RETURN	-.861**	.210**	-.216**	-.068	.028	1.000
2005-06	NSE	GDP	IIP	WPI	PLR	RETURN	2005-06	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	-.797**	1.000					GDP	-.821**	1.000				
IIP	-.422**	.002	1.000				IIP	-.483**	-.009	1.000			
WPI	.796**	-1.000**	-.001	1.000			WPI	.822**	-1.000**	.007	1.000		
PLR	-.796**	1.000**	.001	-1.000**	1.000		PLR	-.823**	1.000**	-.006	-1.000**	1.000	
RETURN	.854**	-.991**	-.091	.991**	-.991**	1.000	RETURN	.879**	-.991**	-.096	.991**	-.991**	1.000
2006-07	NSE	GDP	IIP	WPI	PLR	RETURN	2006-07	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	.009	1.000					GDP	.089	1.000				
IIP	-.006	.462**	1.000				IIP	-.025	.484**	1.000			
WPI	-.046	-.379**	-.661**	1.000			WPI	-.133*	-.443**	-.572**	1.000		
PLR	.052	.167**	-.289**	.165**	1.000		PLR	.156**	.278**	-.191**	-.067	1.000	
RETURN	.251**	-.017	.044	.026	-.005	1.000	RETURN	.181**	-.074	-.117*	.095	.157**	1.000
2007-08	NSE	GDP	IIP	WPI	PLR	RETURN	2007-08	NSE	GDP	IIP	WPI	PLR	RETURN
NSE	1.000						NSE	1.000					
GDP	.984**	1.000					GDP	.987**	1.000				
IIP	.030	-.149*	1.000				IIP	-.013	-.175**	1.000			
WPI	-.121*	-.296**	.988**	1.000			WPI	-.175**	-.333**	.987**	1.000		
PLR	-.118*	-.260**	.796**	.813**	1.000		PLR	-.191**	-.321**	.814**	.835**	1.000	
RETURN	-1.000**	-.984**	-.030	.120*	.117*	1.000	RETURN	-1.000**	-.987**	.013	.175**	.190**	1.000

** AND * DEPICT SIGNIFICANT AT 1 PERCENT LEVEL. AND 5 PERCENT LEVEL RESPECTIVELY.

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APPENDIX –III: P- VALUE AGAINST T TEST FOR SELECTING FACTORS IN EQUATION

P Value in Case Of Securities				P Value in Case Of Portfolios			
1998-99	Beta Coefficient	t- value	p- value	1998-99	Beta Coefficient	t- value	p- value
NSE	-0.2228	-6.5400	0.0000	NSE	-0.6703	-11.9065	0.0000
GDP	-0.0053	-1.0867	0.2780	GDP	0.0002	0.0288	0.9770
IIP	0.0176	2.6350	0.0088	IIP	-0.0165	-1.2266	0.2210
WPI	-0.0022	-0.1933	0.8468	WPI	0.0081	0.4614	0.6449
PLR	-0.0339	-1.8067	0.0718	PLR	-0.0259	-0.8619	0.3895
1999-00				1999-00			
NSE	-0.0985	0.0012	0.0012	NSE	-0.1434	-4.3505	0.0000
GDP	0.2852	0.0000	0.0000	GDP	0.2320	18.5463	0.0000
IIP	0.0856	0.0000	0.0000	IIP	0.1155	15.3894	0.0000
WPI	-0.1068	0.0000	0.0000	WPI	-0.0598	-6.4273	0.0000
PLR	0.0108	0.0000	0.0000	PLR	0.0006	0.2787	0.7806
2000-01				2000-01			
NSE	-0.5931	-150.8139	0.0000	NSE	-0.6029	-434.6828	0.0000
GDP	-0.0015	-0.2626	0.7930	GDP	0.0112	3.6080	0.0004
IIP	0.0167	2.6628	0.0082	IIP	0.1270	4.4788	0.0000
WPI	-0.0007	-0.0835	0.9335	WPI	0.0152	2.4479	0.0150
PLR	0.0693	2.4781	0.0138	PLR	-0.0014	-0.1401	0.8887
2001-02				2001-02			
NSE	2.2019	15.3145	0.0000	NSE	1.4736	8.7772	0.0000
GDP	0.0012	0.0923	0.9265	GDP	-0.0634	-3.9299	0.0001
IIP	0.0000	6.4799	0.0000	IIP	0.0000	4.5686	0.0000
WPI	0.0007	0.0303	0.9758	WPI	-0.1719	-4.7697	0.0000
PLR	0.0000	-0.1657	0.8685	PLR	0.0000	-2.3727	0.0183
2002-03				2002-03			
NSE	-0.8962	-6.1342	0.0000	NSE	-0.4895	-3.5567	0.0004
GDP	-0.1608	-6.9436	0.0000	GDP	-0.1492	-6.3807	0.0000
IIP	-0.5751	-12.2776	0.0000	IIP	-0.5186	-12.1497	0.0000
WPI	0.0058	0.3673	0.7137	WPI	0.0192	1.4518	0.1477
PLR	-0.0225	-2.4566	0.0146	PLR	-0.0191	-2.1420	0.0331
2003-04				2003-04			
NSE	-0.0096	-1.2750	0.2033	NSE	-0.0002	-0.0173	0.9862
GDP	-0.0229	-4.7183	0.0000	GDP	-0.0144	-1.8974	0.0588
IIP	-0.0103	-2.7674	0.0060	IIP	-0.0046	-0.9649	0.3354
WPI	0.0006	0.7584	0.4488	WPI	0.0016	1.7952	0.0737
PLR	0.0037	2.2557	0.0248	PLR	0.0028	1.4215	0.1563
2004-05				2004-05			
NSE	-0.3314	-26.4824	0.0000	NSE	-0.2975	-26.1068	0.0000
GDP	0.0213	1.4319	0.1532	GDP	0.0605	3.7692	0.0002
IIP	-0.0280	-2.8315	0.0049	IIP	-0.0119	-1.0997	0.2724
WPI	-0.2790	-3.0178	0.0028	WPI	-0.3330	-4.0554	0.0001
PLR	-0.0183	-1.5561	0.1207	PLR	-0.0369	-2.9063	0.0039
2005-06				2005-06			
NSE	0.0401	15.2928	0.0000	NSE	0.0453	11.7131	0.0000
GDP	-0.0001	-0.0247	0.9803	GDP	0.0001	0.0248	0.9802
IIP	0.0000	-5.2984	0.0000	IIP	0.0000	-3.2236	0.0014
WPI	-0.0290	-4.6135	0.0000	WPI	-0.0273	-4.7435	0.0000
PLR	0.0000	-6.4462	0.0000	PLR	0.0000	-6.3026	0.0000
2006-07				2006-07			
NSE	4.0340	4.6099	0.0000	NSE	1.9597	3.0083	0.0029
GDP	-0.0221	-0.6642	0.5071	GDP	-0.0488	-1.4476	0.1488
IIP	0.9740	1.7523	0.0807	IIP	0.1630	0.3602	0.7190
WPI	0.5100	1.5356	0.1257	WPI	0.4256	1.3550	0.1765
PLR	0.1233	0.1995	0.8420	PLR	1.6144	2.5936	0.0100
2007-08				2007-08			
NSE	-0.7689	-888.1519	0.0000	NSE	-0.7662	-660.8048	0.0000
GDP	-0.1840	-5.1217	0.0000	GDP	-0.2180	-5.8106	0.0000
IIP	0.0080	1.7368	0.0835	IIP	0.0003	0.0441	0.9648
WPI	-0.0016	-1.7129	0.0878	WPI	0.0001	0.0401	0.9680
PLR	-0.0024	-2.2731	0.0238	PLR	-0.0053	-4.4345	0.0000

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APPENDIX –IV: FACTORS ENTERED INTO THE REGRESSION EQUATION FOR SECURITIES

		Unstandardized Coefficients		Standardized Coefficients	t	p value	Correlations			Collinearity Statistics		R	R Square	Adjusted R Square	Std. Error of the Estimate
		B	Std. Error	Beta Coefficient			Zero-order	Partial	Part	Tolerance	VIF				
1998-99															
1st step	NSE	-0.208	0.034	-0.329	-6.087	0.000	-0.329	-0.329	-0.329	1.000	1.000	0.329	0.108	0.105	0.981
2nd step	NSE	-0.220	0.034	-0.349	-6.463	0.000	-0.329	-0.348	-0.346	0.982	1.018	0.360	0.130	0.124	0.970
	IIP	0.017	0.006	0.148	2.737	0.007	0.101	0.155	0.146	0.982	1.018				
1999-00															
1st step	NSE	-0.770	0.038	-0.758	-20.260	0.000	-0.758	-0.758	-0.758	1.000	1.000	0.758	0.575	0.573	1.307
2nd step	NSE	-0.701	0.034	-0.691	-20.710	0.000	-0.758	-0.766	-0.676	0.958	1.044	0.823	0.677	0.675	1.141
	GDP	0.051	0.005	0.327	9.820	0.000	0.469	0.491	0.321	0.958	1.044				
3rd step	NSE	-0.188	0.035	-0.185	-5.319	0.000	-0.758	-0.293	-0.117	0.401	2.493	0.924	0.854	0.852	0.769
	GDP	0.167	0.007	1.073	23.825	0.000	0.469	0.808	0.524	0.238	4.194				
	IIP	0.122	0.006	0.913	19.104	0.000	0.230	0.740	0.420	0.212	4.721				
4th step	NSE	-0.104	0.031	-0.103	-3.324	0.001	-0.758	-0.188	-0.063	0.375	2.669	0.944	0.892	0.891	0.662
	GDP	0.238	0.009	1.531	25.961	0.000	0.469	0.831	0.492	0.103	9.695				
	IIP	0.111	0.006	0.830	19.781	0.000	0.230	0.752	0.375	0.204	4.903				
	WPI	-0.073	0.007	-0.552	-10.307	0.000	0.173	-0.511	-0.195	0.125	8.001				
5th step	NSE	-0.099	0.030	-0.097	-3.270	0.001	-0.758	-0.186	-0.059	0.374	2.673	0.949	0.901	0.900	0.634
	GDP	0.285	0.013	1.838	22.684	0.000	0.469	0.795	0.412	0.050	19.936				
	IIP	0.086	0.007	0.640	11.872	0.000	0.230	0.565	0.215	0.113	8.820				
	WPI	-0.107	0.009	-0.810	-11.436	0.000	0.173	-0.551	-0.208	0.066	15.247				
	PLR	0.011	0.002	0.259	5.284	0.000	-0.163	0.292	0.096	0.137	7.296				
2000-01															
1st step	NSE	-0.598	0.000	-1.000	-3333.8	0.000	-1.000	-1.000	-1.000	1.000	1.000	1.000	1.000	1.000	1.045
2001-02															
1st step	NSE	2.064	0.150	0.621	13.803	0.000	0.621	0.621	0.621	1.000	1.000	0.621	0.385	0.383	5.249
2nd step	NSE	2.200	0.142	0.661	15.492	0.000	0.621	0.665	0.654	0.980	1.020	0.679	0.462	0.458	4.928
	IIP	0.000	0.000	0.278	6.512	0.000	0.184	0.351	0.275	0.980	1.020				
2002-03															
1st step	IIP	-0.661	0.045	-0.649	-14.744	0.000	-0.649	-0.649	-0.649	1.000	1.000	0.649	0.421	0.419	3.063
2nd step	IIP	-0.455	0.047	-0.446	-9.623	0.000	-0.649	-0.487	-0.381	0.730	1.369	0.730	0.532	0.529	2.757
	NSE	-1.229	0.146	-0.391	-8.427	0.000	-0.622	-0.439	-0.334	0.730	1.369				
3rd step	IIP	-0.574	0.047	-0.563	-12.226	0.000	-0.649	-0.579	-0.449	0.636	1.573	0.774	0.600	0.596	2.531
	NSE	-0.857	0.145	-0.273	-5.912	0.000	-0.622	-0.325	-0.217	0.634	1.576				
	GDP	-0.164	0.023	-0.284	-7.060	0.000	-0.228	-0.379	-0.259	0.835	1.197				
4th step	IIP	-0.577	0.046	-0.566	-12.409	0.000	-0.649	-0.585	-0.451	0.636	1.574	0.780	0.609	0.603	2.531
	NSE	-0.888	0.144	-0.282	-6.162	0.000	-0.622	-0.337	-0.224	0.630	1.587				
	GDP	-0.162	0.023	-0.280	-7.046	0.000	-0.228	-0.379	-0.256	0.834	1.199				
	PLR	-0.021	0.008	-0.096	-2.625	0.009	-0.020	-0.151	-0.095	0.986	1.015				
2003-04															
1st step	GDP	-0.032	0.004	-0.459	-8.969	0.000	-0.459	-0.459	-0.459	1.000	1.000	0.5	0.2	0.2	0.3
2nd step	GDP	-0.029	0.004	-0.406	-7.265	0.000	-0.459	-0.386	-0.369	0.826	1.210	0.5	0.2	0.2	0.268
	IIP	-0.008	0.003	-0.126	-2.261	0.024	-0.296	-0.129	-0.115	0.826	1.210				
3rd step	GDP	-0.027	0.004	-0.380	-6.795	0.000	-0.459	-0.365	-0.341	0.804	1.243	0.5	0.2	0.2	0.265
	IIP	-0.011	0.004	-0.187	-3.155	0.002	-0.296	-0.179	-0.158	0.715	1.398				
	PLR	0.004	0.002	0.151	2.807	0.005	0.089	0.160	0.141	0.866	1.155				
2004-05															
1st step	NSE	-0.347	0.012	-0.862	-29.596	0.000	-0.862	-0.862	-0.862	1.000	1.000	0.9	0.7	0.7	1.890
2nd step	NSE	-0.341	0.012	-0.847	-28.118	0.000	-0.862	-0.850	-0.816	0.927	1.079	0.9	0.7	0.7	1.884
	IIP	-0.010	0.006	-0.053	-1.745	0.082	-0.282	-0.100	-0.051	0.927	1.079				
3rd step	NSE	-0.332	0.013	-0.826	-26.511	0.000	-0.862	-0.836	-0.763	0.853	1.172	0.9	0.8	0.7	1.868
	IIP	-0.029	0.009	-0.145	-3.040	0.003	-0.282	-0.172	-0.087	0.364	2.745				
	WPI	-0.158	0.064	-0.114	-2.486	0.013	0.019	-0.142	-0.072	0.393	2.547				
2005-06															
1st step	WPI	0.030	0.000	0.991	127.714	0.000	0.991	0.991	0.991	1.000	1.000	1.0	1.0	1.0	0.981
2nd step	WPI	-0.032	0.011	-1.049	-2.819	0.005	0.991	-0.160	-0.021	0.000	2518.268	1.0	1.0	1.0	0.937
	PLR	0.000	0.000	-2.040	-5.483	0.000	-0.991	-0.300	-0.041	0.000	2518.268				
3rd step	WPI	-0.029	0.006	-0.954	-4.529	0.000	0.991	-0.252	-0.019	0.000	2519.047	1.0	1.0	1.0	0.531
	PLR	0.000	0.000	-1.805	-8.561	0.000	-0.991	-0.441	-0.036	0.000	2523.099				
	NSE	0.050	0.002	0.176	25.387	0.000	0.854	0.825	0.107	0.366	2.731				
4th step	WPI	-0.029	0.006	-0.949	-4.703	0.000	0.991	-0.261	-0.019	0.000	2519.104	1.0	1.0	1.0	0.509
	PLR	0.000	0.000	-1.828	-9.043	0.000	-0.991	-0.462	-0.036	0.000	2524.168				
	NSE	0.040	0.003	0.142	15.336	0.000	0.854	0.662	0.062	0.189	5.297				
	IIP	0.000	0.000	-0.030	-5.307	0.000	-0.091	-0.292	-0.021	0.516	1.940				
2006-07															
1st step	NSE	3.941	0.872	0.251	4.522	0.000	0.251	0.251	0.251	1.000	1.000	0.3	0.1	0.1	13.073
2007-08															
1st step	NSE	-0.767	0.000	-1.000	-4699.155	0.000	-1.000	-1.000	-1.000	1.000	1.000	1.0	1.0	1.0	0.433
2nd step	NSE	-0.767	0.000	-1.000	-4796.375	0.000	-1.000	-1.000	-0.993	0.986	1.014	1.0	1.0	1.0	0.421
	PLR	-0.002	0.001	-0.001	-4.173	0.000	0.117	-0.238	-0.001	0.986	1.014				

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APPENDIX –V: FACTORS ENTERED INTO THE REGRESSION EQUATION FOR PORTFOLIOS

		Unstandardized Coefficients		Standardized Coefficients	t	p value	Correlations			Collinearity Statistics		R	R Square	Adjusted R Square	Std. Error of the Estimate
		B	Std. Error	Beta Coefficient			Zero-order	Partial	Part	Tolerance	VIF				
1998-99															
1st step	NSE	-0.670	0.056	-0.581	-12.030	0.000	-0.581	-0.581	-0.581	1.000	1.000	0.581	0.338	0.335	0.648
1999-00															
1st step	NSE	-0.897	0.036	-0.828	-24.850	0	-0.828	-0.828	-0.828	1.000	1.000	0.828	0.685	0.684	0.523
2nd step	NSE	-0.755	0.032	-0.696	-23.307	0.000	-0.828	-0.811	-0.643	0.852	1.173	0.886	0.785	0.783	0.433
	GDP	0.070	0.006	0.342	11.465	0.000	0.610	0.563	0.316	0.852	1.173				
3rd step	NSE	-0.232	0.035	-0.214	-6.534	0.000	-0.828	-0.363	-0.121	0.319	3.132	0.951	0.904	0.903	0.290
	GDP	0.170	0.007	0.831	25.190	0.000	0.610	0.832	0.466	0.314	3.184				
	IIP	0.122	0.007	0.639	18.638	0.000	0.344	0.743	0.345	0.290	3.444				
4th step	NSE	-0.144	0.033	-0.133	-4.416	0.000	-0.828	-0.255	-0.072	0.292	3.429	0.962	0.925	0.924	0.256
	GDP	0.230	0.009	1.120	25.982	0.000	0.610	0.840	0.423	0.143	7.003				
	IIP	0.117	0.006	0.612	20.163	0.000	0.344	0.769	0.328	0.288	3.478				
	WPI	-0.058	0.006	-0.322	-9.074	0.000	0.243	-0.476	-0.148	0.210	4.762				
2000-01															
1st step	NSE	-0.598	0.000	-1.000	-3360.495	0.000	-1.000	-1.000	-1.000	1.000	1.000	1.000	1.000	1.000	0.520
2nd step	NSE	-0.598	0.000	-1.000	-3145.308	0.000	-1.000	-1.000	-0.931	0.867	1.153	1.000	1.000	1.000	0.517
	IIP	0.000	0.000	0.001	1.994	0.047	0.365	0.118	0.001	0.867	1.153				
3rd step	NSE	-0.597	0.001	-0.998	-1118.350	0.000	-1.000	-1.000	-0.328	0.108	9.264	1.000	1.000	1.000	0.512
	IIP	0.006	0.002	0.023	2.663	0.008	0.365	0.157	0.001	0.001	880.201				
	WPI	-0.014	0.005	-0.022	-2.592	0.010	0.277	-0.153	-0.001	0.001	826.651				
2001-02															
1st step	NSE	1.769	0.166	0.534	10.631	0.000	0.534	0.534	0.534	1.000	1.000	0.534	0.285	0.282	2.284
2nd step	NSE	1.640	0.170	0.495	9.662	0.000	0.534	0.498	0.478	0.935	1.069	0.554	0.307	0.302	2.253
	WPI	-0.104	0.035	-0.153	-2.985	0.003	-0.279	-0.175	-0.148	0.935	1.069				
3rd step	NSE	1.538	0.174	0.464	8.859	0.000	0.534	0.467	0.435	0.879	1.137	0.566	0.321	0.313	2.234
	WPI	-0.122	0.035	-0.181	-3.470	0.001	-0.279	-0.202	-0.170	0.890	1.124				
	GDP	-0.038	0.016	-0.124	-2.425	0.016	-0.185	-0.143	-0.119	0.916	1.091				
4th step	NSE	1.503	0.169	0.453	8.907	0.000	0.534	0.469	0.425	0.877	1.140	0.601	0.361	0.352	2.170
	WPI	-0.173	0.036	-0.255	-4.764	0.000	-0.279	-0.273	-0.227	0.793	1.261				
	GDP	-0.059	0.016	-0.192	-3.667	0.000	-0.185	-0.214	-0.175	0.831	1.204				
	IIP	0.000	0.000	0.220	4.218	0.000	0.058	0.244	0.201	0.836	1.197				
5th step	NSE	1.474	0.168	0.444	8.777	0.000	0.534	0.465	0.415	0.873	1.146	0.611	0.374	0.363	2.152
	WPI	-0.172	0.036	-0.253	-4.770	0.000	-0.279	-0.274	-0.226	0.793	1.261				
	GDP	-0.063	0.016	-0.205	-3.930	0.000	-0.185	-0.229	-0.186	0.821	1.218				
	IIP	0.000	0.000	0.239	4.569	0.000	0.058	0.263	0.216	0.816	1.226				
	PLR	0.000	0.000	-0.115	-2.373	0.018	-0.125	-0.140	-0.112	0.960	1.042				
2002-03															
1st step	IIP	-.471	.041	-.559	-11.351	.000	-.559	-.559	-.559	1.000	1.0000	.559	.312	.310	1.24742
2nd step	IIP	-.415	.042	-.492	-9.781	.000	-.559	-.503	-.468	.903	1.1079	.594	.353	.348	1.21197
	NSE	-.609	.144	-.213	-4.226	.000	-.366	-.244	-.202	.903	1.1079				
3rd step	IIP	-.519	.043	-.615	-12.110	.000	-.559	-.585	-.542	.775	1.2909	.660	.436	.430	1.13370
	NSE	-.447	.137	-.156	-3.265	.001	-.366	-.191	-.146	.872	1.1462				
	GDP	-.151	.023	-.311	-6.436	.000	-.112	-.358	-.288	.855	1.1690				
2003-04															
1st step	NSE	-.312	.011	-.861	-28.497	.000	-.861	-.861	-.861	1.000	1.0000	.861	.741	.740	.91140
2nd step	NSE	-.307	.011	-.848	-28.337	.000	-.861	-.860	-.841	.983	1.0169	.867	.751	.749	.89514
	GDP	.040	.012	.101	3.378	.001	.210	.197	.100	.983	1.0169				
3rd step	NSE	-.301	.011	-.832	-27.566	.000	-.861	-.854	-.809	.946	1.0575	.870	.757	.755	.88528
	GDP	.064	.015	.164	4.360	.000	.210	.251	.128	.609	1.6417				
	WPI	-.131	.048	-.101	-2.709	.007	-.068	-.159	-.079	.616	1.6243				
4th step	NSE	-.302	.011	-.833	-27.964	.000	-.861	-.858	-.810	.945	1.0577	.874	.764	.761	.87376
	GDP	.068	.015	.173	4.640	.000	.210	.267	.134	.605	1.6527				
	WPI	-.291	.073	-.225	-3.999	.000	-.068	-.232	-.116	.264	3.7864				
	PLR	-.037	.013	-.146	-2.913	.004	.028	-.171	-.084	.334	2.9917				
2005-06															
1st step	WPI	.030	.000	.991	122.090	.000	.991	.991	.991	1.000	1.0000	.991	.981	.981	.45503
2nd step	WPI	-.043	.011	-1.400	-3.849	.000	.991	-.223	-.029	.000	2309.3580	.992	.984	.984	.42456
	PLR	.000	.000	-2.392	-6.574	.000	-.991	-.364	-.050	.000	2309.3580				
3rd step	WPI	-.027	.006	-.877	-4.624	.000	.991	-.265	-.018	.000	2332.4444	.998	.996	.996	.22021
	PLR	.000	.000	-1.710	-8.984	.000	-.991	-.472	-.035	.000	2348.5348				
	NSE	.056	.002	.193	27.747	.000	.879	.856	.109	.320	3.1280				
4th step	WPI	-.027	.006	-.896	-4.800	.000	.991	-.275	-.019	.000	2334.7149	.998	.996	.996	.21659
	PLR	.000	.000	-1.759	-9.367	.000	-.991	-.488	-.036	.000	2364.0846				
	NSE	.045	.004	.156	11.734	.000	.879	.573	.045	.085	11.8179				
	IIP	.000	.000	-.024	-3.242	.001	-.096	-.190	-.013	.263	3.7965				
2006-07															
1st step	NSE	1.996	.645	.181	3.095	.002	.181	.181	.181	1.000	1.0000	.181	.033	.029	5.373
2nd step	NSE	1.768	.648	.160	2.728	.007	.181	.160	.158	.976	1.0250	.223	.050	.043	5.335
	PLR	1.243	.554	.132	2.243	.026	.157	.132	.130	.976	1.0250				
2007-08															
1st step	NSE	-.766	.000	-1.000	-4875.659	.000	-1.000	-1.000	-1.000	1.000	1.0000	1.000	1.000	1.000	.226
2nd step	NSE	-.769	.001	-1.003	-802.473	.000	-1.000	-1.000	-.163	.026	37.9362	1.000	1.000	1.000	.224
	GDP	.000	.000	.003	2.639	.009	-.987	.155	.001	.026	37.9362				
3rd step	NSE	-.762	.002	-.995	-473.923	.000	-1.000	-.999	-.093	.009	115.4445	1.000	1.000	1.000	.216
	GDP	-.001	.000	-.005	-2.516	.012	-.987	-.148	.000	.008	124.0156				
	PLR	-.006	.001	-.002	-4.839	.000	.190	-.277	-.001	.295	3.3922				

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AN ANALYSIS OF REGIONAL DISPARITIES IN THE PERFORMANCE OF SARVA SHIKSHA ABHIYAN (SSA) IN INDIA

DR. M. INDIRA
PROFESSOR
DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION
UNIVERSITY OF MYSORE
MYSORE

R. PRASAD
JUNIOR RESEARCH FELLOW
DEPARTMENT OF STUDIES IN ECONOMICS & COOPERATION
UNIVERSITY OF MYSORE
MYSORE

ABSTRACT

Despite the efforts to reduce regional disparities in education among the states through various measures, regional differences continue to persist. Sarva Shiksha Abhiyan (SSA) is one of the interventions which aim to address these differences at the elementary education level. While some of the factors responsible for these differences could be rooted in culture, having access to school and basic minimum facilities at the school are very important. With this premise, considerable amount of allocations are made under SSA to provide access and basic facilities. This paper examined the regional differences in the allocation of funds and the educational outcomes across different states in India. An attempt has made to find out the correlations between the expenditure on education and the outcomes. The paper based on the secondary data published by MHRD. Based on the results it observed that there is a positive correlation between the expenditure and the outcomes. Further, the regression result shown that among many variables only utilisation of educational funds strongly influences the disparities in educational outcomes of the states.

KEYWORDS

Utilization of education fund, Educational outcomes, Regional imbalance.

INTRODUCTION

Education' is a fundamental right of every child in India. Article 45 of the Indian Constitution has directed that 'the State shall endeavour to provide free and compulsory education to all children between the age group of 6-14 years, within a period of ten years from the commencement of the Constitution'. Unfortunately this dream has not been fulfilled even after six decades of the independence. Education had been a State subject in India till 1976. Under this arrangement a wider regional disparity in educational achievement (literacy) among the states was observed due to differences in the policies and the priority given to education by respective states. Widening regional disparities is a big hindrance to the economic development of the nation. Therefore, with the objective of reducing this 'Education' had been shifted to the Concurrent list through the 42nd Constitutional Amendment. Under this, the Central Government provides the national policy and guidelines and also a part of the financial assistance to the states and the implementation is done by the respective states. Since then the Central Government has been committed to achieve the regional equality in educational opportunity and the National goal of Universal Elementary Education (achieving 100per cent enrolment in Elementary Education) was announced.

A number of educational programmes such as DPEP, Operation Black Board, MDM and Sarva Shiksha Abiyan (SSA) were launched successively by Central Government to achieve the objective of 100 per cent enrolment. The Central government is providing special attention to educationally backward states to improve their educational performance. SSA is a national flagship programme of Government of India in partnership with the States/UTs Governments for operationalizing the project for universal elementary education in the country. It covers all districts in the country in order to ensure access, retention and quality improvement in elementary education.

The important objectives of SSA are

1. All children in school, Educational Guarantee centre, Alternative School, Back to School camp by 2003.
2. All children complete five years of primary schooling by 2007.
3. All Children complete eight years of elementary schools by 2010.
4. Focus on Elementary Education of satisfactory quality with emphasis on education for life.
5. Bridge all gender and social gaps at primary stage by 2007 and at the Elementary Education level by 2010.
6. Universal retention by 2010.

The sharing of expenditure between the Centre and the States during the Xth Plan was on 75:25 basis. The funding pattern has been revised during XIth plan and the sharing is 65:35 for the first two years of the Plan, 60:40 for the third year, 55:45 for the fourth year and 50:50 thereafter. In respect of eight North-Eastern States, the funding pattern is 90:10.

Despite the large amount of spending both by the Central and the State Governments, regional imbalances among states in terms of outcomes continue to persist. In this background it is important to analyse the linkages between the amount spent and the outcomes across the states and identify the contribution of funding on education to the attainment of UEE. The present study makes an attempt in this direction and examines the linkages between the Education expenditure and outcomes across different states. Resent studies on the linkages between the expenditure and educational outcome have thrown light on the importance of funding in reaching the objective of Universal Elementary Education (UEE). A cross country study on the linkages between the public spending, governance and outcomes (Rajkumar and Swaroop, 2008) has found that increasing public spending on primary education and good governance are likely to be more effective in raising primary education outcomes in selected countries including India. An empirical analysis of policy reform and financing of elementary education in India related to quality of service and outcomes (Pradhan and Singh, 2000) has observed that Kerala and Himachal Pradesh have shown good performance in educational outcomes through investing 50 per cent of their total budget expenditure on education. Tilak (2011) studied the growth, achievement and problems of elementary education in India and observed greater inequality in educational outcomes across all rural and urban areas.

OBJECTIVES

The important objective of the present paper is to examine the regional differences in the performance of SSA across different states and analyse the correlation between the allocations and the outcomes.

The objectives of the present paper are

1. To analyze the regional disparities in the allocations and expenditure on elementary education under SSA.

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2. To analyze the regional disparities in the educational outcomes across the states.
3. To identify the factors responsible for the regional disparities in outcomes.

METHODOLOGY

The analysis is based on the secondary data collected from different sources like Ministry of Human Resource Development, GOI and District Information and School Education (DISE) for the entire period of SSA starting from 2004-05. Data relating to the state wise allocation to elementary education, percentage of actual money utilized were analysed. Coefficient of variation was calculated to understand the variation. Performance is measured in terms of outcomes index developed by NUEPA.

Outcomes Index is a composite index of

1. Gross Enrolment Ratio overall
2. Percentage of SC children enrolment
3. Percentage of ST children enrolment
4. Gender Parity index
5. Repetition rate
6. Dropout rate
7. Ratio of exit class I enrolment
8. Percentage of passed children to total enrolment
9. Percentage of appeared children passing with 60 per cent and more marks

Higher the index represents better the performance.

A regression model was used to identify the factors responsible for the regional disparities in the performance of the states in educational outcomes. The following is the model specified with five years average of the variables.

EOI = f (PFU, AI)
EO = Educational Outcome Index
PFU = Percentage of funds utilized
AI = Access Index

TRENDS IN PUBLIC EXPENDITURE ON ELEMENTARY EDUCATION

The concern on equality in economic development in general and education development in particular have been the focus of the government policies since planning era. The objective of Eleventh Plan, 'Inclusive growth' says that gains of the growth should trickle down to the needy section of the society as well as less developed regions of the country.

Allocation of sufficient funds is the first step in improving access to education. It also indicates the priority given to elementary education. In order to even out the influence of the size of the state, instead of absolute amount, the percentage of expenditure on elementary education to the total expenditure on education by respective states has been considered.

Percentage of funds allocated to elementary education in the total education expenditure of the respective states indicates the importance given to the elementary education. The data of Table-1 shows wider variations across the states. It varies from as low as 4.19 per cent in Lakshadweep in 2003-2004 to 70 per cent in Dadra & Nagar Haveli in 2008-09. The educationally backward states like Madhya Pradesh (M.P), Andaman & Nicobar(A & N), Dadar Nagar & Haveli, Jharkhand, Chhattisgarh, Bihar, Assam and Andhra Pradesh (A.P) have given higher priority to elementary education in their total expenditure on education. Though the mean percentage of expenditure on education has not improved much between 2003-04 and 2008-09 (around 30 per cent) there is a considerable improvement in some states. The changes in the share of money spent on elementary education can be grouped in to three categories. The first categories of the states which are already spending more (Arunachal Pradesh, Dadra Nagar and Haveli, Jharkhand, Karnataka, Nagaland) continue to be spending the same amounts. The other categories are those states where the share of expenditure has increased. In states like U.P, Bihar, H.P there is an increase in the allocation. But in the case of the third category states, there is a reduction in the allocations. For example during the first year of the introduction of SSA (2003-04), Madhya Pradesh, which is educationally backward state, has spent 80 per cent of the education budget on elementary education. However, this share has decreased considerably from 2004-05 onwards and it is 66.52 per cent during 2008-09. Same is the case with Tripura and Assam etc,. After the introduction of SSA, educationally backward states like M.P, Bihar, Jharkhand, Assam and A.P have given greater priority to elementary education with around 50 per cent of the expenditure on elementary education.

It is disturbing to observe that out of the 35 States and Union Territories, 16 states have shown a decrease in share of expenditure on elementary education between 2003-04 and 2008-09. Six states have been maintaining same levels. There is an increase in thirteen states. The increase is considerable in states like ANDAMAN & NICOBAR, Bihar, Delhi, A.P, Lakshadweep, Nagaland, Rajasthan and U.P. but it is managed in rest of the states/UTs.

The regional disparity across the states in expenditure on elementary education can be judged by examining the Coefficient of Variation among the states. The CV decreased from 32.60 per cent in 2003-04 to 29.80 per cent in 2004-05 and it increased at 30.68 per cent in 2008-09. This implies that through there is a greater variations among the states in the initial year of the introduction of SSA, it decreased in subsequent years.

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TABLE-1: PERCENTAGE OF PUBLIC EXPENDITURE EDUCATION IN TOTAL EDUCATION EXPENDITURE (REVENUE ACCOUNT)

STATES & UTs	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
A & N	47.95	49.35	48.34	49.66	49.78	51.61
Andhra Pradesh	45.31	45.87	48.22	45.81	46.36	44.75
Arunachal Pradesh	64.02	64.36	63.46	67.41	68.18	65.28
Assam	60.44	60.96	63.38	57.03	60.06	54.99
Bihar	62.37	67.65	63.65	59.82	62.84	70.37
Chandigarh	26.75	35.82	29.43	26.38	26.96	26.93
Chhattisgarh	66.31	65.29	64.81	69.17	65.11	64.09
Dadar & Haveli	69.21	72.77	69.63	68.13	68.52	69.85
Diu & Daman	43.00	59.97	41.01	42.28	42.3	41.06
Delhi	18.22	33.12	26.53	30.89	32.93	29.31
Goa	20.4	20.44	21.58	18.61	20.08	20.91
Gujarat	52.02	55.13	55.14	56.38	54.17	53.64
Haryana	47.76	48.06	50.31	47.62	45.63	47.55
Himachal Pradesh	55.46	56.27	53.68	60.23	64.24	63.57
J & K	48.23	47.02	46.36	38.48	55.29	47.24
Jharkhand	68.72	71.28	64.77	67.94	69.17	66.39
Karnataka	55.01	57.8	56.33	55.48	54.16	55.2
Kerala	42.45	43.09	41.19	42.42	41.34	38.9
Lakshadweep	4.19	2.67	3.1	2.21	5.25	8.77
M.P	80.66	67.38	68.96	68.69	64.14	66.52
Maharashtra	43.74	45.9	42.2	44.86	43.94	43.22
Manipur	45.91	43.34	45.5	43.28	44.22	44.4
Meghalaya	54.41	51.13	54.06	51.13	50.36	50.36
Mizoram	52.88	55.49	55.49	52.36	51.63	50.58
Nagaland	57.93	62.97	61.41	63.88	64.18	64.98
Orissa	58.21	57.93	55.12	55.18	58.25	57.34
Pondicherry	38.43	39.81	39.04	37.81	36.48	36.9
Punjab	24.96	25.13	25.17	22.82	21.73	23.51
Rajasthan	56.65	57.59	60.34	58.92	59.94	60.28
Sikkim	49.14	48.25	47.32	47.93	47.63	46.34
Tamil Nadu	42.64	42.22	40.86	44.00	42.99	43.59
Tripura	57.31	56.54	52.86	43.08	41.33	40.23
Uttaranchal	46.77	42.34	43.39	45.46	45.79	48.01
Uttar Pradesh	57.76	56.62	58.12	56.49	61.89	61.25
West Bengal	33.36	37.37	38.73	37.21	36.74	36.37
Mean	*48.53*	*49.91*	*48.56*	*47.97*	*48.67*	*48.41*
C.V	*32.59*	*29.79*	*30.29*	*31.76*	*30.94*	*30.68*

SOURCES: VARIOUS REPORTS OF BUDGETARY EXPENDITURE ON EDUCATION IN INDIA, MHRD

UTILIZATION OF FUNDS ALLOCATED UNDER SSA

Allocations under SSA are made to different states/UTs based on the norms prescribed under the programme and they are expected to utilize the funds as programmed. Though the norms are uniform, there are large variations across the states/UTs in the utilizations. The actual amount of money spent on elementary education is more important than the allocation itself because that is the amount which has actually reached the target group. Percentage of money actually spent in the total allocation indicates this. The percentage of funds utilized has been calculated for the allocations under SSA. It covers three important components such as Sarva Shiksa Abiyan (SSA), NPEGEL (National Programme for Education of Girls in Elementary Level) and KGBY (Kasturba Gandhi Balika Yojana).

The table-2 shows the percentage of utilization of education fund under SSA across the various states. It indicates that there has been a substantial inter-state variation in utilization of education fund. It varies from 16.38 per cent to 92.0 per cent in 2005-06, 3.49 per cent to 98.78 per cent in 2006-07 and 41.20 per cent to 97.22 per cent in 2009-10. However, the States like Mizoram, Nagaland, Rajasthan, T.N, Tripura, U.P, Uttarkhand, Karnataka, Gujarat, Himachal Pradesh and Arunachal Pradesh have reported substantially higher utilization than the average utilization during all the periods. On the other hand Lakshadweep which utilized only 17.12 per cent in 2005-06 improved to 82.08 per cent by 2009-10. The data shows that there is a continuous increase in the utilization of funds in subsequent years compared to the initial year of SSA. Most of the States/UTs have reached above 60per cent utilization except A & N, Bihar, HP and Manipur. In the state of Bihar only 50 per cent of the allocated funds are utilized during 2009-10 though utilization has improved from 24 per cent during 2005-06. In the case of A & N, there was a sudden increase in the utilization during 2008-09 but declined to 41per cent during 2009-10. Himachal Pradesh is another State where the funds utilization was good during the initial years (82 per cent during 2005-06), but declined to 50 per cent during 2009-10. Same is the case with Manipur. Utilization of funds improved during the second and third years of implementation of SSA, but declined sharply from 2008-09 onwards. Manipur is the only state with 20 per cent of utilization.

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TABLE-2: STATE-WISE UTILIZATION OF FUNDS UNDER SSA

States/UTs	2005-06	2006-07	2007-08	2008-09	2009-10
A & N	47.90	40.59	30.11	80.36	41.20
Andhra Pradesh	67.70	45.53	36.54	60.20	63.30
Arunachal Pradesh	84.49	85.01	74.46	93.00	76.09
Assam	56.55	42.15	88.15	89.46	83.34
Bihar	24.24	33.23	58.48	61.78	50.53
Chandigarh	39.44	53.87	67.31	56.35	74.84
Chhattisgarh	77.07	79.62	87.57	91.38	61.11
Dadar & Nagar Haveli	51.62	37.48	36.15	56.42	54.07
Diu & Daman	16.38	11.58	51.35	63.42	69.17
Delhi	28.20	47.62	56.81	63.98	61.64
Goa	40.61	52.10	75.59	76.27	69.03
Gujarat	78.58	71.99	73.43	68.15	72.27
Haryana	67.42	75.29	64.79	70.19	76.29
Himachal Pradesh	82.05	86.00	89.80	85.40	49.99
J & K	48.07	55.88	84.16	53.56	72.05
Jharkhand	34.21	48.33	64.78	73.28	76.65
Karnataka	82.04	70.84	99.41	92.41	78.40
Kerala	58.70	58.29	89.21	93.82	90.44
Lakshadweep	17.12	3.49	45.99	66.10	82.08
Madhya Pradesh	60.06	71.97	68.42	83.06	87.28
Maharashtra	72.16	96.44	85.72	89.98	90.36
Manipur	25.52	34.55	39.65	19.91	19.78
Meghalaya	58.93	53.76	69.29	65.47	60.94
Mizoram	63.28	98.79	98.63	77.82	97.22
Nagaland	85.01	61.97	89.10	56.02	87.21
Orissa	56.79	67.85	75.94	80.47	80.73
Pondicherry	43.64	42.85	67.05	86.92	90.23
Punjab	52.41	67.74	68.80	98.46	89.30
Rajasthan	88.42	84.36	85.59	90.50	92.20
Sikkim	48.39	34.28	36.32	78.75	83.08
Tamil Nadu	83.63	56.86	78.70	93.56	90.77
Tripura	92.02	84.73	89.60	92.89	80.49
Uttar Pradesh	84.72	76.91	86.52	88.41	74.02
Uttaranchal	86.91	76.12	74.20	80.98	81.51
West Bengal	46.09	63.66	71.03	71.58	75.48
Average	*61.29*	*59.26*	*70.25*	*75.72*	*73.28*
C.V	*45.2*	*37.28*	*26.97*	*21.71*	*22.23*

SOURCE: WWW.SSA.EDUCATON.NIC.IN

Due to improvement in the utilization of funds in subsequent years, the variation among the states in terms of utilization has decreased sharply. Coefficient of variation declined from 45.2 per cent in 2005-06 to 22.23 per cent in 2009-10.

EDUCATIONAL OUTCOMES

Educational outcome is a most appropriate tool to evaluate the performance of education development of the states. Based on the Outcome Index between 2005-06 and 2009-10, the states are ranked and the data is presented in table-3. The data shows that the performance is not uniform across the states. During the period from the introduction of SSA to 2009-10, some states have gained in their rank while some have lost. For example, Tamil Nadu which was ranking one, slipped to three in primary education and two in upper primary education. Same is the case with other three ranks. Himachal Pradesh slipped from 2nd to 7th, Karnataka from 3rd to 4th and A.P from 4th to 6th. Kerala is maintaining its status of 5th rank throughout. Uttaranchal is another state which lost considerably from 10th rank to 26th rank in primary education.

The data shows that compared to 2005-06, states like T.N, Himachal Pradesh, Karnataka, and Andhra Pradesh & Kerala have shown good performance. They have reached top five ranks. But in 2009-10 all states except Kerala slipped one or two ranks below compared to 2005-06 period. While Goa, Haryana, Lakshadweep, Diu & Daman and Bihar have shown least performance during 2005-06, they have significantly improved their ranks over the period. Lakshadweep shows remarkable changes. Its rank improved from 32nd in 2005-06 to 1st in 2009-10.

In the case of upper primary education Tamil Nadu, Andhra Pradesh, Karnataka, Kerala and Pondicherry ranked top five positions during 2005-06. Except Kerala and Pondicherry, remaining three states slipped in their ranks. On the other hand Haryana, Goa, Bihar, Punjab and Lakshadweep which were in the lowest bottom have shown an improvement 2009-10, except Bihar. Both in primary and upper primary education Lakshadweep, which is the Union Territory, shows dramatic improvement. It ranked first position in 2009-10 from its 32nd position in 2005-06. One of the important reasons for this is improvement is its utilization of education fund. Madhya Pradesh, Arunachal Pradesh, Chandigarh, Jharkhand, Manipur, Punjab are the other states which have slipped considerable ranks between 2005-06 and 2009-10. Madhya Pradesh slipped from 12th rank to 23rd rank in primary education and 16th to 27th rank in upper primary education. on the other hand, there are gainers. Pondicherry, ranking 11th reached 2nd in 2009-10 in primary education and from 5th to 3rd rank in upper primary education. The other gainers in both primary and upper educations are Andaman & Nicobar, Dadra & Nagar Haveli, Diu and Daman, Goa, Haryana and Mizoram and Assam in primary education only.

The states which are ranking very low (Bihar, Meghalaya, Sikkim and West Bengal) in the initial years of SSA continue to be at lower ranking even after four years.

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TABLE-3: RANKING OF THE STATES AND UTS ACCORDING TO OUTCOMES

States & UTs	Primary Education		Upper Primary Education	
	2005-06	2009-10	2005-06	2009-10
Andaman & Nicobar	28	20	32	12
Andhra Pradesh	4	6	2	7
Arunachal Pradesh	29	35	29	13
Assam	31	17	13	24
Bihar	30	31	33	35
Chandigarh	16	33	15	26
Chhattisgarh	8	11	9	11
Dadar Nagar &Haveli	24	9	28	23
Diu & Daman	33	27	24	18
Delhi	17	15	27	17
Goa	35	24	34	22
Gujarat	15	16	10	25
Haryana	34	18	35	16
Himachal Pradesh	2	7	7	5
J & K	7	8	12	14
Jharkhand	22	30	22	15
Karnataka	3	4	3	10
Kerala	5	5	4	4
Lakshadweep	32	1	30	1
Madhya Pradesh	12	23	16	27
Maharashtra	6	10	6	9
Manipur	20	28	20	20
Meghalaya	27	29	17	21
Mizoram	19	13	11	8
Nagaland	25	19	21	19
Orissa	9	14	26	33
Pondicherry	11	2	5	3
Punjab	23	34	31	28
Rajasthan	13	32	19	32
Sikkim	21	21	25	34
Tamil Nadu	1	3	1	2
Tripura	14	12	18	30
Uttar Pradesh	18	22	14	29
Uttaranchal	10	26	8	6
West Bengal	26	25	23	31

SOURCE: VARIOUS REPORTS OF DISE FLASH STATISTICS

CORRELATION BETWEEN UTILIZATION OF EDUCATION FUND AND EDUCATIONAL OUTCOMES

In order to understand the association between utilization of education fund and educational outcomes of the States Spearman Rank Correlation between the ranks of utilization of funds and the Outcome Index was calculated. Ranks are assigned in each year based on the performance. The result shows positive correlation between utilization of education fund and outcomes in primary education. The correlation value is 0.393 and it is significant at five per cent. On the other hand correlation between utilization of education fund and upper primary educational outcomes also confirms positive correlation (0.24 per cent) but it is less than the primary education. The correlation results supported the theoretical expectation of increasing utilization of education fund improves the educational outcomes.

FACTORS INFLUENCING ON EDUCATIONAL OUTCOMES

In order to understand how much variation in educational outcomes can be attributed to the utilization of funds and the other factors, the outcome index is regressed over several independent variables namely the economic status of the state measured by the NSDP, percentage of funds utilized, Access index, infrastructure index and teacher index. None of the variables appear to be influencing except utilization of funds. In the final model, only two variables, access to education index and utilization of funds is considered as independent variables. The results are presented below Table 4.

TABLE 4: REGRESSION ANALYSIS

Variable	Standardize Coefficients	't' value	significance
Constant	--	1.056	0.299
Access	0.049	0.350	0.729
Utilization of funds	0.605	4.277	0.000*
R^2 = 0.38			

NOTE: '*' INDICATES SIGNIFICANT AT ONE PER CENT LEVEL.

The model explained 38 per cent of the variation in the education outcomes among the states. Out of the two variables, utilization of funds came out as significant at one per cent level indicating that utilization of funds is extremely important for the improving the educational outcomes.

CONCLUSION

This paper has analyzed the regional disparities in the performance of SSA and the correlation between public expenditure on elementary education and educational outcomes. In terms of utilization of education fund, the decreasing coefficient of variation suggested that the regional imbalance among the States/UTs has been coming down over a period of time. At the same time it was found that still some states like Bihar, M.P, Rajasthan and other educationally backward states have been lagging behind; their performance is lesser than the educationally developed states.

On the one hand the correlation results proved that the utilization of education fund is positively associated with the education outcomes. Moreover among the many variables only utilisation of educational funds was found to be influencing education outcomes. Based on the analysis it can be concluded that that the public expenditure is a necessary condition for improving the outcomes of the elementary education and reducing regional imbalance, but it is not a sufficient condition.

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ABBREVIATIONS

DISE	District Information and School Education
DPEP	District Primary Education Programme
MDM	Mid Day Meals programme
KGBY	Kasturba Gandhi Balika Yojana
MHRD	Ministry of Human Resource Development
NPEGEL	National Programme for Education of Girls in Elementary Level
SSA	Sarva Shiksa Abiyan
UEE	Universal Elementary Education
UF	Utilization of Fund
SC	Schedule Caste
ST	Schedule Tribe
UTs	Union Territories

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IMPACT OF SOCIAL COMPETENCE ON DEVELOPMENT OF YOUNG TECHNOCRATS: AN APPENDAGE TO ONESELF

DR. RUCHI SINGH
HEAD
DEPARTMENT OF MANAGEMENT STUDIES
NATIONAL P.G. COLLEGE
LUCKNOW

DR. RUCHI SHARMA
ASST. PROFESSOR
DEPARTMENT OF RETAIL MANAGEMENT
NATIONAL P.G. COLLEGE
LUCKNOW

ABSTRACT

Social competence determines how we handle relationship. In today's scenario the importance of social competence is essential for the motivation and survival of young technocrats. Through thinking and feeling, the socially competent person is able to select and control which behaviors to emit and which to suppress in any context to achieve any given objective set by them or prescribed by others. Social competence is, possessing and using the ability to integrate thinking, feeling and behavior to achieve social tasks and outcomes value in most context and culture. Very different social competencies are required and valued. Behavior which is dysfunctional and disapproved in one context might be functional and approved of in another. Through thinking and feeling, the socially competent person is able to select and control behaviors to commit and which to suppress in a given context, to achieve any given objective by them or prescribed by others. The different cultures and contexts value different social behaviors, there is nevertheless some broad consensus in most societies about which is desirable, establishing and maintaining a range of positive social relationships that may be refraining from harming others; contributing collaboratively and constructively to the peer group, family, school, workplace and community, engaging in behaviors which enhances and protect health, avoiding behaviors with serious negative consequences for the individual or others or both. Social competence refers to the social, emotional and cognitive skills and behaviors that people need for successful social adaptation. A young's social competence depends upon a number of factors including the child's social skills, social awareness and self-confidence. Social competence determines how we handle relationship. It includes empathy and social skills. Empathy is the awareness of others feelings, needs and concern. Understanding others involves sensing others feeling and perspectives and taking an active interest in their concerns. In today's era, everyone talks of social competence, a concern which focuses upon the development of young technocrats as a social being and as a member of society. Competence refers to the connection between behavior and outcomes; it is the extent to which a person feels capable of producing desire and preventing undesired outcomes. Competence is important for the survival of human beings and innately motivating because the family is the primary context for social development. There are a number of ways in which family interaction patterns may help or hinder the development of social competence. Some researchers have speculated the origins of social competence in terms of family relationship. The socialization process provides a platform for the formation of this guilt which is often difficult to come out. To accomplish their mission and objectives, social competence becomes the key objective for all the corporate. Social competence determines how we handle relationship because it has an impact on holistic development of young technocrats. In the present paper efforts have been made by the author to study the impact of social competence on young technocrats that is discussed at full length in the paper. This study employs primary data composed by communicating to young technocrats of various organizations with structured questionnaire. The subject is comprised of 200 young technocrats. The sample size of 100 working young technocrats and 100 non-working young technocrats' age ranging between 25-35 years with the mean age of 28.6 was taken. They were all residents of Lucknow. Door-to-door survey was employed to ascertain the two groups. They were matched on age, socio-economic status and education. Purposive sampling method was used in this study. An empirical enquiry has been conducted using structured social competence scale. The social competence scale is a self report instrument which included 52 items related to social awareness, social skills and team building. In social awareness there are categories like understanding other, developing others, service orientations, leveraging diversity and political awareness and second factor used is social skill that is to influence, communicate, change catalyst are included. The third category is team building which includes building bonds, collaboration and co-operation. Along with personal data sheet, emotional intelligence, personal competence, social competence, and subjective well-being scales were administered on the subjects one by one. The answers were scrutinized and the data obtained were systematically scored using standard and appropriate scoring methods for the different scales and later subjected to statistical analysis. Means, EX^2, significance of difference between means (CR) and correlations were computed. A good research work requires a clean scientific methodology because only through the application of correct methodology in selection of sampling techniques, appropriate tools of data collection a well-defined conclusion can be drawn on the phenomenon under consideration. Therefore, keeping in mind the requisites of a good research the present study aims to determine the various factors influencing young technocrats like empathy, service orientation, social skills, conflict management, leadership, change management and team capabilities. Many researches argue that human beings are characterized by the motivation and interact with the environment effectively. Significant correlations between self-perceived physical attractiveness and self perceived social competence for both male and female technocrats were found that females and males who perceived self-perceived physical attractiveness and self perceived social competence were more socially competent. This revised conceptualization takes into account relevant personal dimensions as well as environmental qualities in the ability to enhance and maintain a healthy sense of competence. The young technocrats should understand the social, emotional and cognitive skills and behaviors that people need for successful social adaptation. The results showed that the hypothesized prediction regarding factors of social competence in working and non-working young technocrats. The social skills and team building was found to be high in working technocrats than non-working technocrats. It was predicted that working technocrats will be high on subjective welling in comparison to non-working technocrats. The detailed analysis is discussed as length in the full paper. Social competence is, possessing and using the ability to integrate thinking, feeling and behavior to achieve social tasks and outcomes valued in the holistic context. A study of social competence will definitely give the organization its significance and its contribution towards the growth and development of the organization.

KEYWORDS

social adaptation; cognition; hypothesized prediction;competence.

INTRODUCTION

Social competence determines how we handle relationship. In today's scenario the importance of social competence is essential for the motivation and survival of young technocrats. Through thinking and feeling, the socially competent person is able to select and control which behaviors to emit and which to suppress in any context to achieve any given objective set by them or prescribed by others (Grossman and Adams, 1993). Social competence is, possessing and using the ability to integrate thinking, feeling and behavior to achieve social tasks and outcomes value in most context and culture. Very different

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social competencies are required and valued (Gump, 1972). Behavior which is dysfunctional and disapproved in one context might be functional and approved of in another. Through thinking and feeling, the socially competent person is able to select and control behaviors to commit and which to suppress in a given context, to achieve any given objective by them or prescribed by others (Emmons, 1986).

The different cultures and contexts value different social behaviors, there is nevertheless some broad consensus in most societies about which is desirable, establishing and maintaining a range of positive social relationships that may be refraining from harming others; contributing collaboratively and constructively to the peer group, family, school, workplace and community, engaging in behaviors which enhances and protect health, avoiding behaviors with serious negative consequences for the individual or others or both. Social competence refers to the social, emotional and cognitive skills and behaviours that people need for successful social adaptation (Gump, 1972). A young's social competence depends upon a number of factors including the child's social skills, social awareness and self-confidence. Social competence determines how we handle relationship. It includes empathy and social skills. Empathy is the awareness of others feelings, needs and concern. Understanding others involves sensing others feeling and perspectives and taking an active interest in their concerns (Dawds and Hart, 2000).

The term emotional intelligence refers to the child's ability to understand others' emotions perceive subtle social cues, "read" complex social situations, and demonstrate insight about others' motivations and goals. Who have a wide repertoire of social skills and who are socially aware a perceptive is likely to be socially competent. Social competence is the broader term used to describe people's social effectiveness – a child's ability to establish and maintain high quality and mutually satisfying relationship and to avoid negative treatment or victimization from others. In addition to social skills and emotional intelligence, factors such as child's self-confidence or social anxiety can affect his/her social competence (Grandall, et. al., 1965).

LITERATURE REVIEW

Tyler (1978) has described behavioral attributes of psychosocial competence as energizing, tempering as mastery-oriental and not necessarily 'fit-oriental'. The person functioning competently is characterized by a more active coping orientation, high initiative, realistic goal setting substantial planning, forbearance and effort in the service of attaining goals and a capacity.

Research reviewed in the area of competence has shown varied results in relation to academic achievement etc., but there was lack of evidence in the area of mental health and the linkage between competence and well being need exploration (Bandura and walters, 1963).

So, an attempt has been made to study the relationship between psychosocial competence and subjective well-being of young technocrats. The physical and mental health of an individual is largely affected by the various, "psychological" factors operating in his or her environment. The literature has been reviewed on the various psychosocial factors and their relationship with the subjective well-being is seen (Dawds and Hart, 2000).

SOCIALISATION

Socialization may be defined as a process, which focus upon the development of an individual as a social being and as the member of society. It teaches the child the ways and norms of the society. An individual's cultural heritage provides the child with certain norms and values that are internalized in the individual's super ego during the course of development. According to Saraswati et. al., (1977) the development of such a sense is important for cultural survival and it has been generally defined as the internalization of moral values and rules of moral action from external imposition to internal acceptance of these rules. In the traditional Indian society a girl child is subjected to a different kind of socialization process than a boy child.

Davar (1990) points out that guilt is built in Indian women's psyche. The socialization process provides a platform for the formation of this guilt and often it is difficult for the young men and women to come out of this traditional mould. For decades, women have been facing the problem because of their over submissive, subsequent position in the society. Although the women have changed in terms of their roles but there are some core traditional traits, which affect their state of well being. This research shows that girls with skills and competence and hence undermines self confidence. Crandall (1995) found that girls not only show less positive self-concepts than boys from early elementary school to college. They also rate their intellectual abilities lower than boys. Links have been also been found between the role of socialization in the development of personal control. On the basis of this literature there is a need to explore the relationship between the role of socialization and the subjective well being of young technocrats.

Social competence is possesses and is using the ability to integrate thinking, feeling and behaviour to achieve social tasks and outcomes valued in the host context and culture. In a school setting, these tasks and outcomes would include accessing the school curriculum successfully, meeting associated personal social and emotional needs, and developing transferable skills and attitudes of value beyond school (Dawds and Hart, 2000).

Very different social competencies are required and valued in different contexts. Behaviours which are dysfunctional and disapproved of in one context might be functional and approved of in another. Through thinking and feeling, the socially competent person is able to select and control which behaviours to emit and which to suppress in any given context, to achieve any given objective set by them or prescribed by others (Austin, et.al.).

This relativistic definition deliberately omits any specification of a particular outcome. However, populist conceptions of social competence often assume specific outcomes, implying but not making explicit culturally based value judgments. The definition also suggests that a major part of social competence is a set of component skills or procedures applied conditionally (Ajawani, et.al., 2002).These might include perception of relevant social cues, interpretation of social cues, realistic anticipation of consequences of behaviour for self and others, generation of effective solutions to interpersonal problems, translation of social decisions into effective social behaviours, and the expression of a positive sense of self-efficacy. This implies an essentially information-processing model of social behaviour, with an input (decoding) stage, a central processing and decision-making stage, and an output (encoding) stage (Petrides and Furnham, 2000).

However, it does not imply a predominantly cognitive model, and in particular the importance of feeling at all stages should not be underestimated. Feelings can relate to the shelf, other people, groups and affiliations, objects, places and activities, as well as specific events and behaviours. Feelings can be problematic when it excess, in deficit, or distorted or inappropriate. Feelings can stimulate, mediate and reinforce thoughts and behaviour. Feelings may need to be managed directly through the emotions, rather than circuitously through thinking and behaviour (Austin, 2008).

It is felt that while social competence implies intentionally, there might be several effective pathways to the same outcome in any context. In addition, sometimes successful outcomes might be attributed by the child to random chance or external factors, validity or otherwise. Thus it is very simplistic to define social competence only in terms of specific skills or only in terms of specific outcomes, especially when the latter are valued very differently by different groups and cultures (Bradberry and Greaves, 2005). Operational definitions of desirable skills and outcomes are likely to be highly adult-centered, and might neglect the child's own objectives. It follows that peer definition and assessment of social competence might be equally or more valid than adult assessment. Similarly, children perceived by adults as having a "poor self-image" within an adult-dominated context might feel very differently about themselves in peer-dominated context-children have multiple self-concepts as well as multiple intelligences (Bar-on, 1997).

Although different cultures and contexts value different social behaviours, there is nevertheless some broad consensus in most societies about what is desirable; establishing and maintaining a range of positive social relationships; refraining from harming others; contributing collaboratively and constructively to the peer group, family, school workplace and community; engaging in behaviours which enhance and protect health; avoiding behaviours with serious negative consequences for the individual or others or both (Boyatzis, et.al., 2000).

OBJECTIVE

➢ To study the relationship between social competence and efficiency of young technocrats
➢ To analyze the competencies of working young technocrats and non working young technocrats and see the impact of various factors on the competencies
➢ To study the impact of social competence in developing the social skill and team building.

STATEMENT OF THE HYPOTHESIS

The present research intends to explore social competence and subjective well-being in working and non-working technocrats and to make comparisons between two groups among the variables taken care off. Furthermore, the significant relationships amongst the variables were also explored.

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On the basis of logical reasoning and reviewed literature the following hypotheses were formulated for the present study:-
1.) There would be significant difference between the mean scores of working and non working young technocrats for social competence.
2.) There would be significant difference between the mean scores of working and non working young technocrats for total personal competence.
3.) There would be a significant difference between the mean scores of working and non working young technocrats for factors of emotional intelligence.
4.) There would be significant difference between the mean scores of working and non working young technocrats for subjective well-being.

METHODOLOGY

This study employs primary data composed by communicating to young technocrats of various organizations with structured questionnaire. The subject is comprised of 200 young technocrats. The sample size of 100 working young technocrats and 100 non-working young technocrats' age ranging between 25-35 years with the mean age of 28.6 was taken. They were all residents of Lucknow. Door-to-door survey was employed to ascertain the two groups. They were matched on age, socio-economic status and education. Purposive sampling method was used in this study. An empirical enquiry has been conducted using structured social competence scale. The social competence scale is a self report instrument which included 52 items related to social awareness, social skills and team building. In social awareness there are categories like understanding other, developing others, service orientations, leveraging diversity and political awareness and second factor used is social skill that is to influence, communicate, change catalyst are included. The third category is team building which includes building bonds, collaboration and co-operation.

Along with personal data sheet, emotional intelligence, personal competence, social competence, and subjective well-being scales were administered on the subjects one by one. The answers were scrutinized and the data obtained were systematically scored using standard and appropriate scoring methods for the different scales and later subjected to statistical analysis. Means, EX^2, significance of difference between means (CR) and correlations were computed.

ANALYSIS OF THE DATA AND RESULTS

In the present research it was intended to study emotional intelligence and psychosocial competence in relation to subjective well-being of working and non-working young technocrats of Lucknow. 100 working and 100 non-working technocrats were assessed for the above stated psychological correlates. The statistical facts are provided in table 1.1.

TABLE 1.1: SHOWING STATISTICAL FACTS OF WORKING AND NON-WORKING YOUNG TECHNOCRATS

Sr. No.	Psychological Variables	Working technocrats	Non-working technocrats
1	Emotional Intelligence	N=100 M=215.91 EX^2=11930.19	N=100 M=207.89 EX^2=14633.79
2	Personal Competence	N=100 M=1069.88 EX^2=215333.96	N=100 M=761.91 EX^2=185847
3	Social Competence	N=100 M=997.34 EX^2=202586.24	N=100 M=934.35 EX^2=283068.75
4	Subjective well-being	N=100 M=89.80 EX^2=3342.84	N=100 M=91.46 EX^2=4466

By looking at table 1.1 and graph-1 it is evident that the total mean score for emotional intelligence and personal competence is found to be greater, in working technocrats in comparison to non-working technocrats. On the other hand for social competence and subjective well-being the mean scores for non-working technocrats have been found to be greater than the working technocrats. The results show that the working technocrats are emotionally intelligent and posses personal competence whereas are less socially competent and low on subjective well-being than the non working technocrats.

GRAPH 1: SHOWING THE MEAN SCORES OF WORKING AND NON-WORKING YOUNG TECHNOCRATS FOR EI, PC, SC, AND SWB
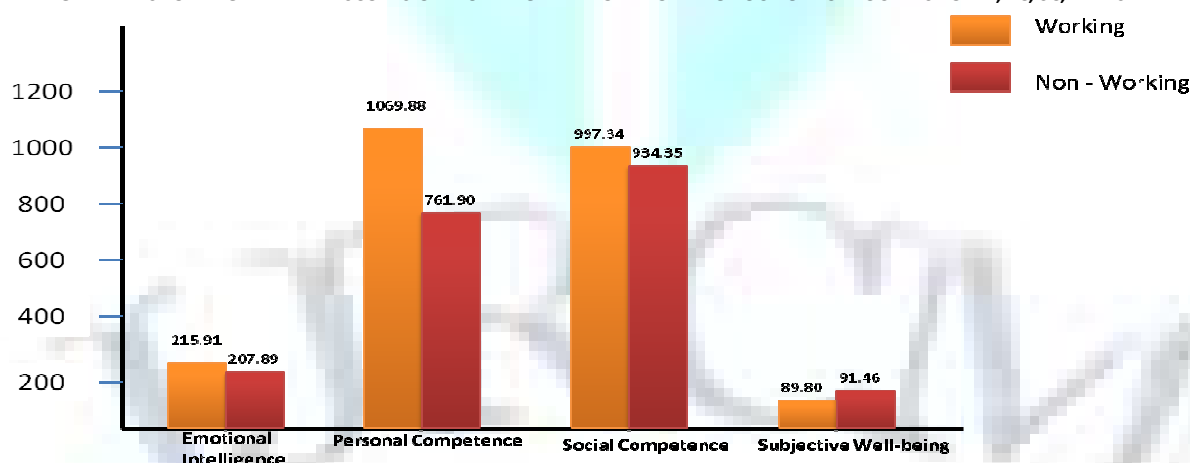
By looking at table 1.2 (graph-2) it is evident that mean scores on all the three factors of personal competence that are self awareness, self regulation and self motivation have been found to be greater for working young technocrat group than non-working young technocrats. The results indicate that working technocrats possess greater personal competence in comparison to non-working technocrats.

TABLE 1.2: SHOWING THE STATISTICAL FACTS OF WORKING AND NON-WORKING YOUNG TECHNOCRATS ON THE THREE FACTORS OF PERSONAL COMPETENCE (PC)

Sr. No.	Factors of Personal Competence	Working technocrats	Non-working technocrats
1	Self Awareness	M=388.22 EX^2=107591.16	M=256.88 EX^2=97810.56
2	Self Regulation	M=328.96 EX^2=39107.84	M=250.52 EX^2=31284.96
3	Self Motivation	M=352.70 EX^2=30071	M=254.5 EX^2=30625

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GRAPH 2: SHOWING THE MEAN SCORES OF WORKING AND NON-WORKING TECHNOCRATS OF PERSONAL COMPETENCE
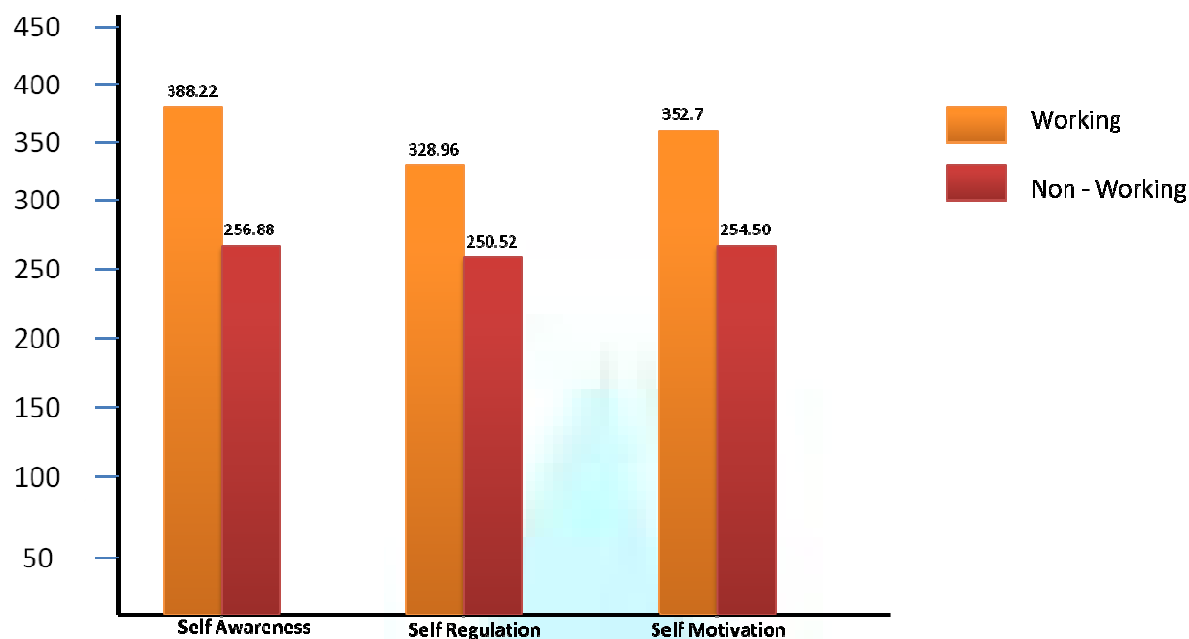
By looking at table 1.3 it is evident that on the social awareness factors the non-working technocrats yield higher mean scores than their counterparts whereas for social skills and team buildings the mean across of working technocrats have been found to be greater than them.

TABLE 1.3: SHOWING THE STATISTICAL FACTS OF WORKING AND NON-WORKING YOUNG TECHNOCRATS ON THE 3 FACTORS OF SOCIAL COMPETENCE (SC)

Sr. No.	Factors of social competence	Working technocrats	Non-working technocrats
1	Social Awareness	M=322.24 EX^2=32586.24	M=412.75 EX^2=83068.75
2	Social Skills	M=337.80 EX^2=36166.0	M=246.10 EX^2=56229
3	Team building	M=337.30 EX^2=39107.84	M=275.50 EX^2=88025

GRAPH-3: SHOWING THE MEAN SCORES OF WORKING AND NON-WORKING TECHNOCRATS OF SOCIAL COMPETENCE
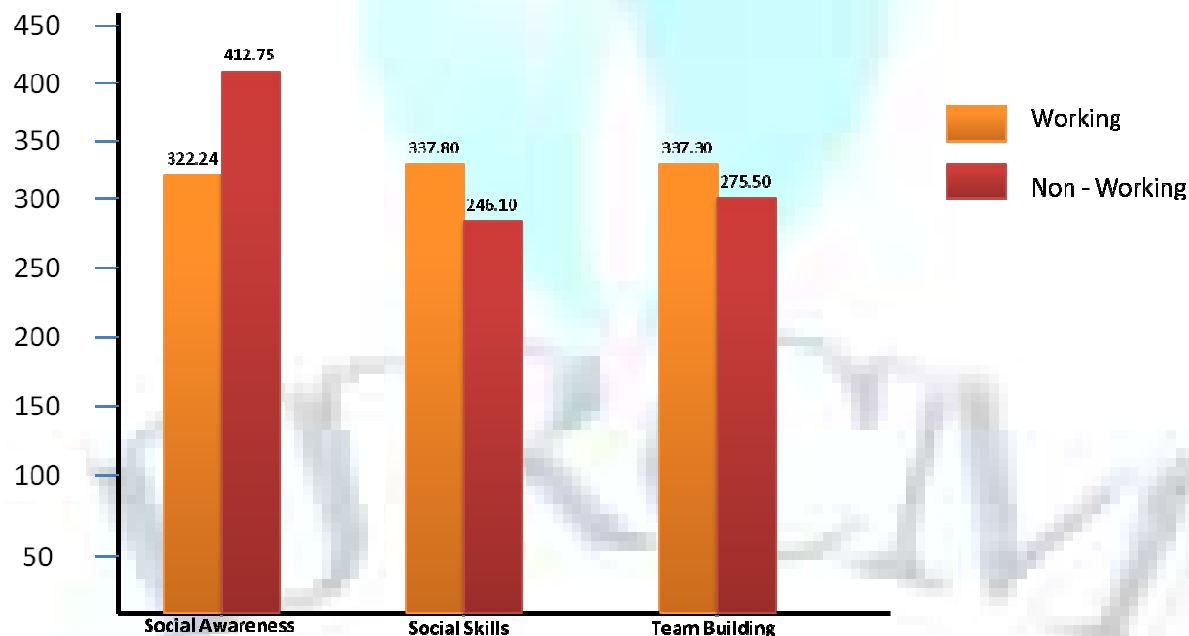
By looking at table 1.4, it is evident that for the three factors of personal competence i.e., self awareness, self regulation, self motivation reveal high significant difference between the scores of working and non-working young technocrats. In addition total personal competence is also found to yield high significance level (p<0.01).

TABLE 1.4: SHOWING THE CR FOR COMPARISON BETWEEN WORKING AND NON-WORKING FOR PERSONAL COMPETENCE

Factors	Mean difference	SE MD	df	t-ratio	Significance level
1 Self awareness	131.34	21.29	198	6.17	P<0.01
2 Self regulation	78.44	2.667	198	29.41	P<0.01
3 Self motivation	98.20	2.48	198	35.6	P<0.01
Total personal competence	307.98	7.79		39.53	P<0.01

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A close look of table 1.5 indicates that among the working technocrat group no significant relationships have been found between the dimensions of personal competence and subjective well-being whereas for non-working young technocrats group significant relationships are found between the two groups on self regulations dimension of personal competences.

TABLE 1.5: SHOWING THE CORRELATION BETWEEN THREE FACTORS OF PERSONAL COMPETENCE AND SUBJECTIVE WELL-BEING

Dimension of personal competence	Group	r (correlation)	df (degree of freedom)	Probability
1 Self awareness	Working	0.02	98	P>0.01
	Non-working	0.03	98	P>0.01
2 Self regulation	Working	0.07	98	P>0.01
	Non-working	-0.38	98	P>0.01
3 Self motivation	Working	0.04	98	P>0.01
	Non-working	0.07	98	P>0.01

By looking at table 1.6 it shows that for the factor of social competence and the subjective well-being the working technocrats correlation is found to be significant whereas for social skills and subjective well-being the correlation yields a significant value for non-working technocrat group.

TABLE 1.6: SHOWING CORRELATIONS BETWEEN THE THREE FACTORS OF SOCIAL COMPETENCE AND SUBJECTIVE WELL-BEING

Factors	Group	r (correlation)	df (degree of freedom)	Probability
1 Social awareness	Working	0.22	98	P<0.05
	Non-working	-0.04	98	P>0.05
2 Social skills	Working	0.04	98	P>0.05
	Non-working	0.25	98	P<0.05
3 Team Building	Working	-0.12	98	P>0.05
	Non-working	-0.04	98	P>0.05

RESULTS AND DISCUSSIONS

The above stated analysis showed that average emotional intelligence scores of working technocrats were found to be greater than non- working technocrats. Significance of difference between the two groups is respect to total emotional intelligence was tested statistically by computing a critical ratio. The obtained critical ratio (t=4.90) was significant at 1 percent level of significance for 198 degrees of freedom which provided sound statistical ground to retain the research hypothesis regarding the difference in emotional intelligence of working and non- working technocrats and rejecting the null hypothesis in this regard.

In the present study it was hypothesized that there would be a significant difference between the mean scores of working technocrats and non- working technocrats for personal competence and factors associated with it would be found higher in working technocrats than their counterparts showing a high level of significance between the two groups. The result supported these hypothesized predictions.

The results supported the hypothesized predictions regarding factors of social competence in working and non- working technocrats. All the t-ratios are found highly significant P<0.01 level. The social skills and team building was found to be high in working technocrats than non- working technocrats.

It was predicted that working technocrats would be high in subjective well-being in comparison to non- working technocrats. The results of the present study do not confirm this hypothesized prediction.

The results of the present study revealed significant relationship between emotional intelligence and subjective well-being. A negative significant relationship was found to exist for working group of technocrats between the two variables whereas a positive significant relationship was found for non- working technocrats' emotional intelligence and subjective well-being scores.

The correlations between some of the factors of emotional intelligence and subjective well-being are also found to be significant for working and non- working technocrats. The findings of the study show that working technocrats who have high emotional intelligence scored significantly low on subjective well being whereas non- working with high emotional intelligence scored high on subjective well-being.

It was hypothesized that personal competence would bear significant relationship with subjective well-being in working and non-working technocrats. No significant correlations existed between personal competence and subjective well-being whereas significant positive relationship was found between the scores for working group whereas for non-working technocrats no significant difference was found for social competence. The results indicated high subjective well being regarding working young technocrats.

PSYCHOSOCIAL COMPETENCE IN RELATION TO SUBJECTIVE WELL BEING

a) **Personal competence:** It was hypothesized that personal competence would be significantly related with working and non-working young technocrat's subjective well-being. The results did not current the hypothesized prediction for total personal control, self awareness factor and self motivation for both the groups. Irrespective of the fact there existed a significant negative co-relation between self regulation and subjective well-being for non-working young technocrats showing that higher self regulation is related to low subjective well-being.

b) **Social competence**: It was hypothesized that social competence would be significant relationship with subjective well-being in working and non-working groups young technocrats. A significant positive relationship was found between the scores for working technocrat group whereas for non-working technocrat group no significant difference was found.

For the social awareness factor of social competence significant correlation to exist with subjective well-being for non-working young technocrats and social skills component of social competence significant correlation exist with subjective well-being regarding non-working young technocrats. For team building component of social competence no significant relationship exists with subjective well-being.

MAJOR RESULTS

A good research work requires a clean scientific methodology because only through the application of correct methodology in selection of sampling techniques, appropriate tools of data collection a well-defined conclusion can be drawn on the phenomenon under consideration. Therefore, keeping in mind the requisites of a good research the present study aims to determine the various factors influencing young technocrats like empathy, service orientation, social skills, conflict management, leadership, change management and team capabilities. Many researches argue that human beings are characterized by the motivation and interact with the environment effectively. Significant correlations between self-perceived physical attractiveness and self perceived social competence for both male and female technocrats were found that females and males who perceived self-perceived physical attractiveness and self perceived social competence were more socially competent. This revised conceptualization takes into account relevant personal dimensions as well as environmental qualities in the ability to enhance and maintain a healthy sense of competence.

The young technocrats should understand the social, emotional and cognitive skills and behaviours that people need for successful social adaptation. The results showed that the hypothesized prediction regarding factors of social competence in working and non-working young technocrats. The social skills and team building was found to be high in working technocrats than non-working technocrats. It was predicted that working technocrats will be high on subjective welling in comparison to non-working technocrats.

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IMPLICATIONS

Social competence is, possessing and using the ability to integrate thinking, feeling and behaviour to achieve social tasks and outcomes valued in the holistic context. A study of social competence will definitely give the organization its significance and its contribution towards the growth and development of the organization.

LIMITATIONS AND SUGGESTIONS

The present study has also certain constraints unlike several other studies conducted in applied social sciences. The sample was restricted to working and non-working technocrats of Lucknow ranging from 25 to 35 years. This study could have been done on various age levels. The demographic variables were not studied which may affected the results. The results of the study cannot be generalized for all technocrats.

The present research was based on urban sample. Similar studies should be conducted on rural sample. Such comparisons would show some interesting features especially relevant in the Indian context. The social variables were not taken into account. Only few psychological variables were studied.

Last but not the least; efforts should be made to introduce intervention techniques to enhance emotional intelligence, psychosocial competence and subjective well being of young technocrats.

To summarize, emotional intelligence, psychosocial can be instrumental in many areas in the work place and can help to achieve well being in technocrats. The young technocrats should get in touch with their emotion and feeling. High emotional quotient (EQ) helps in creating on enthusiastic environment and improves that one feels about themselves and how they relate to other reduces stress levels and resolves emotional issues and improves help and well-being. To conclude, the essential ingredients psychological and subjective well being include emotional intelligence and personal and social competencies.

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RURAL WOMEN IN GROUP ENTERPRISES

DR. K. VIDYAVATHI
ASSOCIATE PROFESSOR
DEPARTMENT OF BUSINESS ADMINISTRATION
SAHYADRI COLLEGE OF ENGINEERING AND MANAGEMENT
ADYAR

ABSTRACT

Group entrepreneurship offers an effective development strategy for harnessing rich rural resources into large number of income generating opportunities. A pragmatic view is that the group venture provides the poorest and most marginalized people who cannot start the venture individually with the opportunities to earn an income. While individual entrepreneurship is guided by profits largely depends for its success on the competence of individuals, success of group entrepreneurship depends to a large extent on the effective support of support agency in the form of supply of raw materials, selection of machinery, procurement of orders and quality control etc. The purpose of this research paper was to increase the understanding about women who are running group businesses, with the emphasis on "understanding" their experiences. The researcher has made an attempt to have better qualitative information and quantitative data and statistics to profile women engaged in group ventures (demographic information, benefits and sustainability). This would also assist in promoting awareness of the role of group entrepreneurship in the economy. The study has found that group enterprises promoted by SIRI have provided opportunities for the young rural girls, after their school education, to generate income and become financially independent. The young girls' earnings from the group business are very important and contributed to the improvement in the quality of life of poor rural families. Women entering SIRI's group enterprises are in the age group of 17-25 indicating that it is mostly unmarried women who do not have household and reproductive responsibilities that generally place severe constraints on developing business. This research shows that SIRI offers a range of services to address the various constraints faced by women entrepreneurs and the sample respondents are quite happy with its support structure. From this research it is evident that women's group enterprises need handholding support of support agencies for their start up, growth and sustainability since the poor and less educated rural women do not have basic competence to successfully manage a business.

KEYWORDS
Rural women, Group entrepreneurship, SKDRDP, SIRI.

INTRODUCTION

In most countries, regions and sectors, the majority of business owners/managers are male (from 65% to 75%). Not only have women lower participation rates in entrepreneurship than men but they also generally choose to start and manage firms in different industries than men tend to do. The industries (primarily retail, education and other service industries) chosen by women are often perceived as being less important to economic development and growth than high-technology and manufacturing. It is well recognized now that women have vast entrepreneurial talents which could be harnessed so as to convert them from the position of job seekers to job givers. Women entrepreneurship also acts as a catalyst for social change and development. With the change of times, cultural norms, socio-economic needs and increase in literacy levels, more and more women are entering the field of entrepreneurship. Owing to the introduction of the schemes to promote self employment, various advisory bodies in different states and efforts of the voluntary bodies, entrepreneurship among women have gathered momentum. Accordingly enterprises run and managed by women are growing in different parts of the country. Regarding women entrepreneurs in India, figures relating to 1988-89 reveal that there are more than 153260 women entrepreneurs claiming 9.01 per cent of the total 1.7 million entrepreneurs in India. This is almost double the percentage when compared to 1981. There were more than 295680 women entrepreneurs claiming 11.2 per cent of the total 2.64 million entrepreneurs in India during 1995-96 (M.Punitha et.al 1999). According to the Third All India Census of Small Scale Industries conducted in 2001-02 and subsequent estimates made, only 10.11% of the Micro and Small Enterprises in India are owned by women while 9.46% of the MSE enterprises are managed by women. For the year 2006-07 their estimated number is 12.99 lakh women managed enterprises and 12.15 lakh women owned enterprises.

BACKGROUND OF THE STUDY

Group entrepreneurship offers an effective development strategy for harnessing rich rural resources into large number of income generating opportunities. The great advantage of group entrepreneurship is that it can be carried out with the poorest of the poor. With the group entrepreneurship rural poor can earn their living within a sustainable village economy by undertaking entrepreneurship. A pragmatic view is that the group venture provides the poorest and most marginalized people, who cannot start the venture individually with the opportunities to earn an income. On group entrepreneurship hardly anything has been written. It is a new subject. The concept is still "fuzzy" and in the eyes of some, somewhat suspect.

While individual entrepreneurship is guided by profits largely depends for its success on the competence of individuals, success of group entrepreneurship depends to a large extent on the effective support of link organizations, government or non government. Group entrepreneurship can help marginalized poor and illiterate in undertaking mass based activities in a viable manner. In this perspective the role of support agency in the form of supply of raw materials, selection of machinery, availability of credit, workshops, improved technology, procurement of orders and quality control is very important.

In the year 1982, on the occasion of the installation of 39 feet monolithic statue of Lord Bahubali in Dharmasthala, a small temple town in South India, Dr.D Veerendra Heggade launched Sri Kshetra Dharmasthala Rural Development Project (SKDRDP) aimed towards the up liftment of the rural poor. Ever since the project has encompassed various aspects of rural development to make the rural living an enjoyable process. In three coastal districts of Karnataka-Dakshina Kannada, Uttara Kannada and Udupi, SKDRDP is engaged in intensive fight against poverty, ignorance, illiteracy, alcoholic abuse, and gender discrimination, division of villages on the lines of caste, creed and money power.

PROMOTION OF ENTREPRENEURSHIP AMONG RURAL WOMEN

SKDRDP has been striving for the socio-economic empowerment of unlettered, underemployed rural women without lands. Beedi rolling is a major occupation of the under privileged women in Dakshina Kannada and Udupi districts of Karnataka State in South India. In beedi rolling women often have to work very long hours to earn an income even approaching a living wage or when demand is minimal, they may have little hope of earning enough to survive. In the recent past, the main stay of women viz., beedi rolling is on the decline in these two districts. In order to provide an alternative employment for the women dependent on beedi rolling SKDRDP has promoted various income generation activities in production and service sector under Siri Gramodyoga Yojane started in 2002. Self help groups are motivated, trained and assisted in setting up various group ventures. These groups are given professional assistance in acquiring the skills, finance, raw materials procurement, production and marketing of the products. A brand name "SIRI" has been created to market the products produced by the groups. Fast moving chemical products like detergent cake, detergent powder, phenyls, washing liquids, scouring powder, candles, incense sticks etc., confectionaries sweets and condiments, packed foods, pickles, ready made garments etc are being manufactured and sold under the brand name "SIRI".

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In rural areas the combination of poverty, low levels of formal education and women having a very low social status creates special challenges for women to engage in business on individual basis. SKDRDP has improved the prospects for women's Entrepreneurship by providing appropriate, efficient and effective support services for women entrepreneurs- on individual and group basis in the study area. *However they still represent a minority of all entrepreneurs. Not only have women lower participation rates in group entrepreneurship but also they are not highly or positively motivated towards business ownership.* The explanation commonly given for this negative attitude is that women have generally gone into business by default. They have started enterprises when no other options were available to them in order to overcome or alleviate their poverty, rather than purposively pursuing business ownership by choice.

RURAL WOMEN IN GROUP ENTERPRISES

The purpose of the research was to increase the understanding about women who are running group businesses, with the emphasis on "understanding" their experiences. In this research paper an attempt was made to have better qualitative information   and quantitative data and statistics to profile women engaged in group ventures (demographic information, benefits and sustainability). This would also assist in promoting awareness of the role of group entrepreneurship in the economy. The researchers have studied 10 groups engaged in various businesses promoted by SKDRDP in the taluks of Belthangady and Puttur of Dakshina Kannada District of Karnataka in South India.

In the study area, women's group enterprises promoted by SKDRDP   are having following common characteristics:

➢ Women's businesses are primarily micro enterprises
➢ They are operating from appropriate premises
➢ They have accessed significant finance from the banks.
➢ Women are concentrated in the business that is often labeled as "gendered" or "feminized" sectors.
➢ Women are having few skills and little ability to manage their businesses and take business decisions on their own or without external assistance
➢ Women are seen to have limited business vision with their main aim being to earn an income
➢ Women's enterprises are at the subsistence level and associated with poverty reduction activity
➢ High concentration of young girls.

DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE

There are about 270 units in Dakshina Kannada District wherein more than 3000 women are producing various products. Of the total 200 units 190 units are agarbathi (incense sticks) units. Annual business of these units is over Rs 3.5 crores, of which Agarbathi units' business has the largest share of about Rs 2.5 crores. For this study, the researchers have interviewed 200 respondents engaged in different group activities. Over 60 percent of the respondents were in agarbathi units (Table 1).

TABLE-1: DISTRIBUTION OF RESPONDENTS BY TYPE OF FIRMS

Firm type	No. of respondents	Per cent
Agarbathi units	127	63.5
Areca plate unit	16	8.0
Readymade garment unit	22	11.0
Doll making unit	8	4.0
Food processing unit	18	9.0
Reksin bag unit	9	4.5
Total	200	100.0

Source: Field Survey

AGE

The women members interviewed came from varying age groups. The survey shows that the youngest women were in their late teens, and the oldest were over 45. As shown on the table-2 a large proportion (64 per cent) of the women surveyed were aged between 17-20 years. A large, indeed over 80 per cent of respondents were aged between 17 and 25 years. This profile is different from the previous research on women entrepreneurs owning and managing individual businesses. This could be explained by the fact that for the girls, from lower income groups, after the secondary school education, SIRI provides opportunities to generate income and become financially independent. For these girls SIRI is more attractive because other options available for them to earn income are either agricultural labor or beedi rolling in the study area.

TABLE -2: AGE CATEGORY OF RESPONDENTS

Age Category	Number of respondents	Percent
Below 20	128	64.0
20-25	39	19.5
25-30	12	6.0
Above 40	21	10.5
Total	200	100.0

Source: Field Survey

LEVEL OF EDUCATION

The educational levels of the women in this study ranged from those who had never been to school (19 or 9.5 per cent of all the women) to those with pre university qualifications. However, the highest proportion (about 57 per cent) of   women entrepreneurs in the sample have completed secondary school education (SSLC) and Less than 10 per cent of women entrepreneurs are without any formal education. Of those who reported they had no formal education, the majority are in the incense stick (agarbathi) units. The overall educational profile of the women interviewed is quite different from that normally portrayed for women entrepreneurs in rural areas. To a certain extent, this is not surprising given the tendency of past research to focus on women in the informal sector, and the fact that this study's focus was on women in formal businesses promoted by SIRI.

TABLE-3: EDUCATIONAL QUALIFICATION OF RESPONDENTS

Educational Qualification	Number of respondents	Percent
illiterate	19	9.5
Primary school	40	20.0
SSLC	114	57.0
PUC	27	13.5
Total	200	100.0

Source: Field Survey

WOMEN ENTERPRENEURS RPEVIOUS EXPERIENCES

When looking at what the women entrepreneurs had been doing immediately prior to being in group business, the survey findings revealed that the majority (65 per cent) of women entrepreneurs came straight from school. A very small percentage of women (5 per cent) were running other businesses, while 30 per cent of women entrepreneurs were employed in either cashew factories or/and beedi rolling. Consistent with earlier research, most women were previously

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employed in traditionally female occupations such as beedi rolling, tailoring, and cashew factories. Further, when the women were asked whether they had any work experience of relevance to their current business, respondents working in garment unit and few women in incense stick unit said that they did. In the sample the women noted that the skills and competencies (particularly tailoring) acquired played a critical role in entering the SIRI.

MARITAL STATUS

Most of the women entrepreneurs (over 80 per cent) are unmarried girls. The table 4 shows that only 37 respondents were married when they joined the SIRI. These married women in the sample have grown up children and this enabled them to join the SIRI's group enterprises. From this data, it is clear that the majority of the women entrepreneurs in this study do not have household and reproductive responsibilities to fulfill in addition to developing their own business. In this respect they have not experienced, and presumably are still not experiencing, the typical constraints on their time and mobility associated with these responsibilities, as emphasized in most of the previous research on women entrepreneurs.

TABLE-4: MARITAL STATUS OF RESPONDENTS

Marital Status	Number of members	Percent
Married	37	18.5
Unmarried	163	81.5
Total	200	100.0

Source: Field Survey

Perhaps the most important reason for the low concentration of married women (majority of married women are engaged in the beedi rolling from home) is that they have the primary responsibility of managing the household and meeting the social, and at times the material, needs of all of those in the household – be they spouse, children, in-laws or other family members. The women entrepreneurs interviewed by the researcher also endorsed this view that the problems they may experience by joining SIRI were related to gender issues, and the major reason for this may arise from the severe constraints that family responsibilities place on their working time. The working time in SIRI enterprises is morning 8-30 to evening 5-30 with one hour lunch break. However, the research also shows that despite the severe pressures on their time because of juggling business and household duties, there are many married women who are running successful businesses which have helped them to sustain their families.

In the study area work sites are usually some distance from home and work schedules lack the flexibility required by children. The presence of children at the work site would jeopardize productivity. Moreover, mechanical and electric equipment may pose considerable danger to younger children. Therefore, the greater availability of childcare, may enable women (as it is women who typically care for children) to participate in entrepreneurship. Hence, the right to childcare is of central importance, especially while promoting entrepreneurship among women.

FAMILY BACKGROUND

The research also examined the profile of the respondent's family. Majority of the respondents came from low income families where the father is an agricultural labor and the mother is either beedi rolling or doing cashew peeling work from home. The majority of the women's parents have primary education. The proportion of women entrepreneur's fathers and mothers who never attended school is low at about 20 percent. Further the respondents were found to be living in neutral families where girls will have more time and freedom, better mobility and improved chances of being in some economic activity. Women entrepreneurs in this study benefited positively from the support of their family through receiving moral and practical support. In this respect the family set-up was experienced more as a social asset for business, rather than as a source of hindrance or constraint. In summary, the sample of women interviewed in this study is clearly not typical of the women entrepreneurs described in other literature.

CASTE

From the table 5 it is clear that women entrepreneurs are not a homogenous group and they belong to different social/religious groups. The caste wise distribution of respondents indicates that backward castes (gowdas & billavas) form the highest proportion in the total sample. Further women differ from each other in terms of education, work experience, age, caste and religion.

TABLE -5: CASTE WISE DISTRIBUTION OF RESPONDENTS

Caste	Number of respondents	Percent
Backward castes	158	79.0
SC-STs	24	12.0
Muslims	18	9.0
Total	200	100.0

Source: Field Survey

EARNINGS

Earnings of sample women differ depending on the type of business. In the sample 78 percent of women earn incomes in the range of Rs 60-100 per day. Majority of these women are working in incense stick units and garment unit. There are few women in the sample who earn more than Rs 200 per day that too in incense stick making.   17 percent of the sample women earn income in the range of Rs 100-150 and are working in areca plates making unit, food processing and chemicals units. Certainly, the earnings of sample women are relatively high when compared to women in beedi rolling or working in/for cashew factories.

TABLE-6: DISTRIBUTION OF RESPONDENTS BY EARNINGS PER DAY

Earnings per day(in Rs)	Number of respondents	Percent
60-75	104	52.0
75-100	52	26.0
100-150	34	17.0
Above 150	10	5.0
Total	200	100.0

Source: Field Survey

MOTIVATING FACTORS AT THE ENTRY LEVEL

This research has identified factors that motivated the women to go into Group business. Researcher felt that the main stimulus for group business ownership was associated with the high levels of unemployment experienced among rural young girls. The educated young girls have few employment options and hence turn to meaningful and sustainable employment opportunities available in group ventures promoted by SIRI.

SIRI offers a range of programmes and activities to promote and support enterprise development among rural poor on individual as well as group basis. The business support services of SIRI are appropriate to women's needs and the business support providers (particularly the sevanirathas- the grass root workers, of SKDRDP) are easily accessible. As the group enterprises are an important instrument for poverty alleviation women entered SIRI in search for ways to escape poverty and create a better life for one's self and one's family. Rural women often have fewer of their own resources and/or poorer access to resources than men; and they have less control over their own time, labor and mobility, and less access to formal (higher) education and skills training to start the business individually. With minimal assets – be they social, human, financial, physical or natural, women lack the basic competence to successfully manage a business, employees, marketing and resources individually and hence they are attracted to the group ventures supported by SIRI.   From the field survey it was evident that most of the women entrepreneurs are attracted to group business as a way of creating employment for themselves. Other motives include supplementing

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family income, financial independence, enjoyment of the work they are doing, use of existing competencies, means of meeting their own and their household needs.

SUPPORT SERVICES FROM SIRI

Previous research on women entrepreneurs indicates that constraints faced by women entrepreneurs are complex and calls for a wide range of services to address them. The support structure of the SIRI has efficiently and effectively addressed the constraints that small businesses run by women usually face. SIRI provides hand holding support to women in every aspect of the business.   The sample respondents are very much satisfied with the support services provided by SIRI. Broadly there are seven different kinds of services which have proved effective in supporting and sustaining group enterprises of women. The types of support services that are received by sample women are explained below.

1. TRAINING*:* Training is one of the most common business development services provided. Sample women engaged in various businesses received training in appropriate women friendly trades like incense stick making**,** reksin bag making**,** confectionaries, sweets and condiments, pickles, masala making**,** candle making**,** readymade garments, fast moving chemical products like detergent cake, detergent powder, phenyls, washing liquids, scouring powder and so on. The period of training ranged from one week to six months. The girls engaged in Agarbathi business received a week's training while girls in the garment unit received six months training. Training is provided at free of cost.

2. CREDIT: Credit is a constraint faced by many women entrepreneurs the world over and women need support to be able to access mainstream banking and finance. Increased access to credit is a key to the development of women entrepreneurs in small and micro enterprises. In the post-training phase, the women are linked to the banks to get loans for venturing into the business activity. In these connection women's group enterprises are promoted with the help of a central government scheme called SGSY (Swarnjayanthi Gram Swarojgar Yojana), which is committed for the promotion of rural enterprises in India.

3. BUSINESS PREMISES: As women experience particular difficulties in obtaining workspaces and business premises, the SKDRDP has extended all the support to women entrepreneurs to have appropriate and affordable premises and in many cases at free of cost.

4. TOOLS, EQUIPMENT AND MACHINERY*:* SKDRDP has given hand holding support in acquiring sophisticated tools, equipments and machinery along with advanced technology. For instance, 'Maithri' doll making unit in Dharmasthala has Chinese technology and are producing   high quality dolls equivalent to dolls made in China.

5. SOURCING RAW MATERIALS: SIRI procures the raw materials required for the group enterprises. Sourcing raw materials is extremely important to those ventures like textile, doll making, incense sticks etc because it is the main cost of the finished product. Product prices can move outside the competitive range if small-scale producers must buy raw materials in the retail market, and they have difficulty in buying wholesale due to the small quantities they require. This gave the SIRI a role in working with wholesalers in order to develop better market relations and also in acquiring high quality raw materials.

6. MARKETTING ASSISTANCE: There is clear evidence from the previous researches that women experience a range of constraints with the marketing of their business and with selling in general. In many cases women face tough competition. Those in the chemicals sector in particular face competition from the multi national corporations. These women entrepreneurs also lack promotional "know how" beyond word-of-mouth selling, and not being aware of sources of information and assistance for market-related problems. Many women entrepreneurs lack the necessary skills associated with selling and negotiating with clients and suppliers, and they face both practical and social problems in accessing non-local markets. SIRI provides total marketing support. For the women involved in food processing, chemical products, incense sticks etc SIRI provides not only   packaging materials, quality labels, advertisement support but also takes total responsibility of selling the products produced by women. Hence, with the total marketing support women have had no major problems with their business.

7. CONTINOUS FOLLOW-UP AND MONITORING*:* Constant follow- up and monitoring by the supervisors of SIRI is contributing for the sustainability of women enterprises. During this phase all possible help in the form of knowledge, technical skills and inputs, advice and help in decision making are provided to enable them to solve their problems. In the study area women entrepreneurs are very much satisfied with the wide range of business support services provided by SIRI Gramodyoga Yojane of SKDRDP, especially related to marketing, training, start-up and development of their businesses.

BENEFITS OF ENTERPRENEURSHIP TO RURAL WOMEN

Empowering women particularly rural women is a challenge. Micro- enterprises in rural area can help to meet this challenge. Micro-enterprises not only enhance national productivity, generate employment but also help to develop economic independence, personal and social capabilities among rural women. Following are some of the personal and social capabilities which are developed as a result of promoting enterprise among rural women:

- Economic empowerment
- Improved standard of living
- Self confidence
- Enhanced awareness
- Improvement in decision making status
- Sense of achievement
- Increased social interaction
- Improvement in leadership quality

During the field survey the sample women have pointed out several benefits that they have derived from entrepreneurship. The most important benefit of group ventures is that it has given women the opportunity to create their own income through self-employment. The majority of entrepreneurs are earning higher incomes as compared to others engaged in beedi rolling, cashew peeling or working in cashew factories or areca nut sorting units. Further there is a scope for increasing the earning levels.

TABLE -7: CONTRIBUTION OF EARNINGS TO HOUSEHOLD EXPENDITURE

Contribution of earnings in percentage	Number of respondents	Percent
50	56	28
30	118	59
20	36	18
Total	200	100.0

Source: Field Survey

Another benefit of business pointed out by sample women is that business has given them a sense of pride and personal satisfaction. A large number of young women have pointed out that they are proud of being able to contribute to family well being. When asked how much they contributed to their household expenditure from the business on a regular basis. These contributions varied, but the largest group (little less than 60 per cent) contributed around one third of their earnings to the household expenditure such as for paying the electricity bill, telephone bill, and school fees of their younger brothers/or sisters. Over 25 per cent of respondents are contributing around half of their earnings to family. In few cases the young girls have taken the responsibility of repaying the debts of their parents. More than 15 per cent of respondents have been using major portion their income to buy jewelleries, clothes and saving for their marriages.

In addition to the economic benefits, there are several non economic benefits that can not be ignored. Non-economic benefits of the business are related to women's status and quality of life. Engagement in group activities has improved women's status in their families and communities. Factors such as changes in women's workload, their control over income, decision-making status in the household, level of family support, stability of income, and improvement in working conditions have improved women's social position. Equally important are the more qualitative outcomes related to human and community development such as acquisition of skills, self-esteem, individual and family well-being and community participation.

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Many of those surveyed are satisfied with the success of the business although the women defined business success differently. For example, they measured the success in the following ways. 20 per cent of the respondents defined the success in terms of the profitability of the business. A large majority of respondents (Over 50 per cent) stated that their venture is successful because it enables them to support the family. Equally a large number of respondents (over 80%) claimed that business is success because it has created regular jobs for them.

When asked about sustainability of the business activity, particularly, if SIRI withdraws, the majority of women (about 85 per cent) felt that they lack abilities, skills and expertise in certain business matters. Women pointed out that they lack the self-confidence and those personality traits important to the success and sustainability of the business such as assertiveness, ambition and vision. In addition to women's relative lack of exposure to the world of business, women's business networks are poorly developed as social assets. This in turn impacts on a range of factors that adversely affect the women entrepreneurs at all levels Their access to the essential abilities, skills and experiences for business is also adversely affected by various constraints on their mobility, not only due to their dual (household) and triple (community) roles and responsibilities but also due to society's expectations, customs, practices etc. In a more general way, society's views are largely negative about women entrepreneurs who associate and network with others in business. Such "others" are also predominantly male and strangers and they too deter women from accessing, entering and developing such networks.

The impact of the relative lack of women entrepreneurs' "know how" and "know who" in the world of business can be illustrated in several ways. *For example in taking business decisions*- The majority of women entrepreneurs in the research openly acknowledged their weaknesses in directing and managing the business highlighted their need for support in decision making. Seen in this context, the women entrepreneurs are supported by the supervisors and other functionaries of SIRI in decision-making. A large number of women (more than 90 per cent) highlighted problems of markets and marketing. About little more than 60 per cent of women mentioned the problems of sourcing raw materials at a reasonable price from the wholesalers. They expressed the fear of being cheated by agents/dealers in sourcing raw materials from far away places like Bangalore and/or Mysore. Few of the challenges mentioned by the women entrepreneurs such as problem of sourcing raw materials, marketing, lack of confidence in making decisions etc were labeled as gender-based issues specific to women, although combining the roles of family and business is not major challenge for women in the study area. However, further discussions with the women (particularly in the case studies) revealed gender-related issues such as limited mobility, societal expectations, customary laws, practices, etc., which underpin many of the challenges highlighted by the women in the survey.

CONCLUSION

This study examined the socio-economic and demographic profile of women in the group enterprises, based on a survey of 200 women. The study has found that group enterprises promoted by SIRI have provided opportunities for the young rural girls, after their school education, to generate income and become financially independent. The young girls' earnings from the group business are very important and contributed to the improvement in the quality of life of poor rural families.

Women entering SIRI's group enterprises are in the age group of 17-25 indicating that it is mostly unmarried women who do not have household and reproductive responsibilities that generally place severe constraints on developing business.

Our research shows that SIRI offers a range of services to address the various constraints faced by women entrepreneurs and the sample respondents are quite happy with its support structure. From our research it is evident that women's group enterprises need handholding support of support agencies for their start up, growth and sustainability since the poor and less educated rural women do not have basic competence to successfully manage a business.

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RELATIONSHIPS ARE EASY TO GET INTO.... BUT DIFFICULT TO GET OUT OF!' – A CASE OF EU AND GREECE

DR. GIRIJA NIMGAONKAR
ASSOCIATE PROFESSOR
SINHGAD INSTITUTE OF MANAGEMENT
PUNE

ABSTRACT

The future of international trade will be determined not by multilateral trade mechanism but by the process of regional economic integration. In the last few decades, the regional factors have played a vital role in the global transformation and regional integration has become a prominent issue in many of the disciplines. Of all the regional trading blocs, European Union is considered as the most advanced form of regional integration with 27 member nations and unified economic policies. However, this process of unification of Europe has come to a halt because of the failure of some member nations such as Greece in following the fundamental economic principles. The crisis in Greece has created ripples all over world and no solution seems to be plausible in the current scenario. The case of Greek economy clearly emphasizes that the economic fundamentals are the key determinant of the success of regional integration process. Any neglect on this part may trigger crisis in the regions with long -term effects on rest of the world.

KEYWORDS
Regional economic integration, European Union, Economic crisis.

INTRODUCTION

Regional integration has emerged as one of most important developments in world the Politics and Economics. In the last few decades, it is observed that the regional factors are playing a vital role in the global transformation and regional integration has become a prominent issue in many of the disciplines. The multicultural, multifactor and multidimensional character of regionalism (Hettene, 2005) is being discussed, assessed and analyzed from various perspectives in disciplines such as comparative politics, political economy, international economics, international relations and international business management.

CONCEPTUAL AND THEORETICAL UNDERPINNINGS OF REGIONAL INTEGRATION

The concept of region can be looked upon from various perspectives. The regions, from geographical perspective, are sub-national entities –either historical provinces or more recently created nations. In international relations, regions are supranational subsystems of the international system having their own dynamics. In a broader sense, a region consists of 'states which have some common ethnic, linguistic, cultural, social and historical bonds.' They can be differentiated from each other in terms of social, political and economic cohesiveness.

Often a particular region is mixed up or linked with a particular regional organization which tries to shape 'its' region by promoting cooperation among states and other actors. Such kind of regional cooperation covers any interstate activity, which involves interest of all the partners and differs from regional integration, which is a trans-local process. Regional integration involves some changes in terms of sovereignty (Hettene *ibid*). As it encompasses too many desperate phenomena, it is generally broken down into regional social integration, political integration and economic integration.

Regional economic integration implies the economic and political agreements among countries that give preference to member countries in commodity trading. This is, basically, to facilitate intra-regional trade. The preferential treatment given to the member countries of a trade group affects the competitiveness of goods in international markets. Thus, the regional integration is preferred over multilateral trading agreements because of their shorter duration, political and geographical considerations and similarities of interests of countries belonging to a particular region (Joshi, 2009).

Political analysts discuss regional integration from functional (Mitrany, 1966) and inter-governmentalism (Tayler, 1982) approaches where the focus is on institutions and processes. The Economic theory considers the welfare implications or effects of discriminating mergers of markets in a region. Viner (1950) in his seminal contribution to Customs Union theory has stressed on the trade creation and trade diversion effects of economic integration. The theory of Optimum currency area (Mundell, 1963) looks at integration with a focus on understanding the conditions under which it is economically efficient to create a union.

The empirical experiences in regional grouping suggest that the regional economic integration helps bridge the development gaps among the members (Salvatore, 2007). It helps Less Developed Countries to take advantage of global market access opportunities. Regional economic integration schemes help optimal deployment of region's natural, financial, human and technological resources. This can be attained through several forms of regional integration such as preferential trade agreements (PTA), Free Trade Areas (FTAs), Customs Union (CU), Common Market (CM) and Economic Union (EU) culminating into Political Union (PU).

Regional economic integration is a complex phenomenon, which involves various political, social, financial and economic implications for the particular region. The first full-fledged attempt towards regional integration was made by Europe with 27 member nations and was considered as one of the landmarks in the economic history of the world.

REGIONAL INTEGRATION IN EUROPE - HISTORICAL PERSPECTIVE

The first major voluntary regional integration initiative appeared in the nineteenth century when in 1828 Prussia established a customs union with Hesse-Darmstadt (Mattli, 2001). This was followed successively by various forms of integration in European nation states. However, during 1950s, the idea of European integration was re-invented and the process of merging European nation- states into one prosperous economy and stable polity began.

The creation of the European community is difficult to be captured in a theoretical framework. It can be called as a phenomenon *sui generis*. The process of integration in Europe can be better understood if we consider the preconditions that laid the foundations of this process. After the Second World War, Euro-communism was on rise. Countries were suspicious about whether the complete sovereignty should be provided to Germany considering the political and military threat it may pose to the neighboring countries. However, a strong Germany was also essential for the security of the western countries in Europe. Thus the need for a new European institution was felt which would cement the economies of member countries into an interdependent maze out of which independent aggressive action by a single country (such as Germany) would be impossible (Mattli *ibid*). The first step towards this direction was constituted by the Schuman plan, which laid the foundations of European Coal and steel Community (ECSC).

During 1950s to 2010, the European nations went through various phases of regional integration. In the first phase during 1957, the process was strengthened by the Treaty of Rome signed by six European countries. During 1960s, there was removal of trade barriers amongst the member nations and agreement over the joint control over agricultural production was signed. It is known as the Period of Economic Growth. During 1970s and 80s many more European nations joined EU and there was initiation of the process of single market with a free flow of trade across EU borders. In 1990s, the single EU market was created with four freedoms of movement of goods, services, people and money. During this period, the Maastricht treaty was signed determining the criterion for accession to European Union.

On January 1, 2002, Euro as a common currency came into existence. The membership of European Union reached to 27 nations. The treaty for establishing European Constitution was also signed by these members reflecting a move towards political integration.

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However, in the year 2010 the process of regional integration in Europe came to a halt when four member nations Greece, Portugal, Italy and Spain were found to be vulnerable due to high government debt levels and rising fiscal deficit to GDP ratio. Of all the four economies, Greece became the weakest link in the Union in March 2010 when the country was observed to be on the verge of debt crisis.

GREECE- THE COUNTRY PROFILE

Greece, also known as Hellenic Republic, was the first country in the Europe where advanced early civilization emerged. The emergence of City-states resulted into the great prosperity and unprecedented cultural boom under the democratic environment.

The country is located in the South Eastern Europe situated on the southern end of the Balkan Peninsula. With a population of 10,964,020, the country shares the borders with Albania, Macedonia, Bulgaria and Turkey. The country is a parliamentary republic with a system of distribution of power between executive, legislative and judiciary branches. Table 1 reflects the key economic indicators of the country for the year 2009.

TABLE 1: KEY ECONOMIC INDICATORS FOR GREECE (YEAR 2010-11)

Sr. No.	Economic Indicators	Values
1	GDP (PPP based)	$318.7 Billion
2	GDP growth rate	-4.5
3	GDP Per Capita	$28189
4	Real value added by sector	
A	Agriculture	12.3%
B	Industry	-11.6%
C	Services	-5%
5	Current account balance	-10.4%
6	Unemployment rate	12.7%
7	Public debt	147.3% of GDP
8	Inflation Rate	4%
9	Government Deficit	-10.4%

Source: OECD, Country Statistical Profile, 2011

THE PROCESS OF INTEGRATION OF GREECE WITH EUROPEAN COMMUNITY

The relationship between Greece and EU dates back to the 1960s when country submitted the application for accession to the EEC in June 1959 which led to the Association Agreement between Greece and the EEC, signed in June 1961. This agreement was the first step towards the integration of Greece with European Community. However, with the establishment of dictatorship in Greece, the agreement was frozen in 1967 and was again reactivated in 1974.

Greek government was keen about the integrating country with the EU as a full member and therefore it submitted the application for full membership in 1975. The major reasons which were put forward by the government ((Ministry of Foreign Affairs, Greece) while submitting the application were as follows-

1. European Union is an institutional framework, which will bring stability in the political system and institutions of Greek economy.
2. The accession will help Greece to enforce its independence and position within the regional and international systems and reduce its dependence on US.
3. It will help modernization and development of the economy and society.
4. Greek being a European nation wanted to have presence and impact on the process of integration.

The accession application from Greece was accepted by the European Community and Greek became a member nation of EU in 1981.

In the initial phases of accession, Greece requested economic support for restructuring the economy, which was accepted, and Integrated Mediterranean Program approved funds for Greece. The country introduced new structural policy – Delors Packet in 1988.

The economic reports by the Greek Government reflected that the economy was having strong foundations during 2002 to 2007 with a labor force of 4.9 million and it was the second most industrious country among OECD countries after South Korea. Annual Growth of Greek GDP surpassed the respective levels of most of its EU member nations. Greek's PPP adjusted Per capita income was world's 26th highest (Ministry of Foreign Affairs, Greece).

FAILURE IN CONFORMING EU PHILOSOPHY

However, throughout the process of integration, in spite of the membership of EU, Greek suffered from poor macroeconomic performance because of the expansionary fiscal policies. When Maastricht treaty was signed in 1991 Greece was far away from meeting the convergence criteria. The fulfillment of the integration criteria remained only on the papers. It was revealed that Greek governments always misreported or falsified the country's official economic statistics. The country was consistently spending beyond the means and was hiding the actual deficit from the EU overseers. Greek never achieved the targets related with inflationary levels, interest rates, internal debt and fiscal discipline in the stipulated time span though it was a precondition for joining the common currency area.

Fiscal Deficit: In case of Greece, successive governments run large deficits to finance public sector jobs, pensions and other social benefits. The currency was devalued to help finance the borrowings. In the initial phases after the introduction of Euro, Greece was able to borrow due to lower interest rates. However, this raised Greek budgetary deficit substantially at around 9% of GDP in 1985 and 12.7% in November 2009.

Government Debt: Since the joining of Euro, the Debt to GDP ratio in Greece remained above 100%. Further, the global financial crisis in 2008 affected the Greek economy severely as two of the country's major industries- tourism and shipping were badly affected by the declining revenues. There was tripling of Debt to GDP ratio from 34.7% in 1987 to 120% in 2010. During this period, the interest payment on debt accumulated reached almost 12% of GDP.

Inflation: The economy experienced high inflationary pressures because of populist policies pursued by politicians. The average inflation rate in Greece was 19.8%, which was thrice the EU average. All beyond the threshold permitted by the rules of EMU. The huge expenses on Olympics also contributed to high inflationary pressures and increased government expenditure. Greek was somehow able to retain the control over growth rates during this period.

In 2010, again the economy experienced financial expansion because of populist government policies. The EU policy guidelines demand reduction in the role of Government and agricultural sector in the economy. However, Greek government followed completely opposite policy within the scope of vote hunting and populism. For Instance, a job that now pays 55,000 Euros in Germany pays 70,000 Euros in Greece, even with the fact that Germany is a more productive nation. As Lewis writes, "To get around pay restraints in the calendar year the Greek government simply paid employees a 13th and even 14th monthly salary -- months that didn't exist". The necessity of reducing the Government was constantly overlooked by the politicians and the number of government workers was multiplied just to please the voters or as a part of rhetoric on solving unemployment problem. The practice of unwisely decreed high wages, generous retirement and medical benefits led to long term economic imbalances.

The inevitable result of this practice was shifting of this burden of increased government expenses to markets, increasing the taxes and borrowings. Further, the process of privatization was carried out in such a manner that it created more debt for government and more pressure on markets. This delayed the investments and the solution to unemployment was again sought in government expansion. The socio-political factors also contributed to the crisis and the economy was on the verge of bankruptcy.

The Crisis: In the first quarter of 2010, the excessive national debt created anxiety amongst the investors who demanded higher interest rates from the nations with high debt levels or deficits. However, the governments were not in a position to finance the deficits and service the high debt levels with higher interest

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rates. There was a crisis of confidence, which widened the bond yield spreads and in other EU member states including Germany. In Greece, the government requested the bailout package of $ 61 billion from EU and IMF for the repayment of Greek bonds.

The major problem with Greece, and for the matter with Spain and Portugal was, the high percent of their debt in the hands of foreign creditors. They had a credibility problem due to low growth rate, high deficit and less foreign direct investment. Ultimately, in April 2010 the economy experienced lowering of its AAA rating along with three other nations by the Standard and Poor to junk status.

The banks that had generously invested in AAA gilts experienced devaluation of their holdings and the European sovereign debt crisis began to spread all over the world. The country being a part of Common Currency area, the macroeconomic pressures started affecting the common currency- Euro. The concerns over the ability of Greece to tackle its deficit spread to Spain and Portugal, which have both been hit hard by a severe downturn in the property and construction industries. The fragile global growth recovery and huge debts carried by some countries made the investors to anticipate the debt crisis in EU. The cost to the investor of buying insurance against a default by Greece, Spain and Portugal jumped up as the stock markets across Europe fell. It was expected that if Greece economy is not rescued the whole EU might undergo the financial crisis just as if the Lehman brothers led the financial crisis in US.

A major question in front of EU was how to reduce the pressure on Euro to maintain the value of this common currency? Secondly, there was a need to devise a rescue plan for the weak member nations undergoing financial crisis. Though Greek Finance minister assured that the country would cut its deficit to 3% threshold allowed under EU stability rules by 2012, concern remained whether Greek public will be able to stomach the austerity measures required. On 2nd of May 2010, the Euro zone countries and the IMF agreed to a €110 billion loan for Greece, conditional on implementation of harsh Greek austerity measures. On 9th of May 2010, Europe's finance minister approved a comprehensive rescue package worth almost a trillion dollars, which aimed at ensuring financial stability across Europe and avoiding the spread of the crisis in the region.

However, by the end of 2010 it was realized that the accomplishment of targets was harder for Greek and it signaled a recession much harsher than expected. Again, in May 2011, there was a great protest in Greece against the austerity measures. Standard and Poor downgraded the country debt rating to CCC, the lowest in the world. The crisis sent ripples in the world with major stock exchanges exhibiting the losses. Euro zone along with IMF made efforts to help Greece by lowering the interest rates of EU loans to Greece and writing off Greece debt to EU.

There are three possible policy options available to European Union and Greece. European Union may write off the Greece debt completely, rescue the economy first and allow Greece to continue to be a member of EU. Some economists are of the view that though the huge rescue packages are having calming effect on the crisis situation for the time being, Europe may still suffer a meltdown in near future (Ayer, 2010). The fresh stimulation packages may solve the problem for the time being but it needs to be understood that each package entails additional government debt.

The second school of thought believes that the fundamental problem that Greece or for that matter many of the European economies are facing is 'living beyond the means' on the part of the government. Until the date, the structural reforms were supposed to be reserved for the Third World countries. The Greece crisis, however, has proved that long-term remedy for economic crisis can be found only through structural reforms and austerity measures. If Greece implements the austerity measures and reduce the debt GDP ratio to acceptable levels it may be allowed to function as a member of EU. However, such austerity measures in the face of depression is a bad idea and a millions of workers are already paying the price for the willful amnesia.

Some of the experts believe that the best possible option available for Greece and EU is to engineer an orderly default on Greece's Public debt. This will be followed by withdrawl of Athens simultaneously from the Euro zone and reintroduce its national currency drachma at a debased rate. However, this may lead to disintegration of EU as along with Greece there are other defaulters who deserve the same fate.

ISSUES RAISED BY THE GREECE CRISIS

Now the economists, political analysts and financial experts are trying to find out answers to the following questions pertaining to the regional integration –

What should be the prerequisites for joining a monetary union?

How to resolve the policy conflicts involved in national priorities and the predefined goals of the Union, which is a supranational entity?

What are the factors that play a critical role in the success of any scheme for regional integration?

What are the lessons that the other trading blocs such as ASEAN or NAFTA can learn from the experience of European Union?

CONCLUDING REMARKS

The crisis in Greek and Europe has many implications for the various regional blocs that have developed in last few decades as well as for all those economies that are lagging in terms of sound economic fundamentals. Paul Krugman, the renowned economist, has already pointed out that Britain is doing worse this time than it did during the Great Depression (Economic Times, 2012). The situation in Spain is much worse and if it fails down, no rescue fund, however large, would be able to drag it out. In Asia, India is staring at Rs. 1.5 lakh crore fiscal deficit which, if not contained in time, will affect the growth prospects adversely (TOI, 2012).

The experience of EU suggests that for the success of any integration scheme, the strong economic fundamentals is the key factor in integration process and any negligence on this front by even a single member nation may trigger the crisis and financial meltdown in the Union as well as in the rest of the world. Ultimately, one can conclude that the integration of Greece with EU has resulted into a kind of relationship, which is easy to get into but difficult to get out of !!!

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PURCHASE BEHAVIOUR AND INFLUENCE OF SOCIO ECONOMIC FACTORS WITH REFERENCE TO ORGANIC FOOD PRODUCTS

DR. P. SANTHI
ASSOCIATE PROFESSOR
DEPARTMENT OF COMMERCE
AVINASHILINGAM INSTITUTE FOR HOMESCIENCE & HIGHER EDUCATION FOR WOMEN
COIMBATORE

ABSTRACT
Consumer behaviour refers to the actions of consumers in the market place and the underlying motives for those actions. There has been a growing awareness of the fragility of the environment. Marketers saw increasing consumer interest in the environment as a marketing opportunity to target ecologically- concerned consumers. Affective responses helps consumers to reach purchase decisions the marketers seek to influences affective responses by creating messages that appeal to consumers. Organic foods are made according to certain production standards. The Government of India has set up a National Institute of Organic Farming. The formulate rules, regulations, and certification of organic farm products in conformity with international standards. All this arguments leads the marketers to find answer, to whether their socio economic studies helps the residents to buy organic food products and whether the attitude about organic food product is positive and influences to buy organic food products and In order to answer the above queries, the present study has been carried out. An empirical study entitled "Purchase Behaviour And Influence Of Socio Economic Factors With Reference To Organic Food products" " has been carried out with a objectives to find out purchase behavior of the respondents and willingness to purchase of Organic food products, Cognitive, Affective and Behavioural aspects of attitude of respondents to Organic Food Products. The study was carried out in Coimbatore City with the sample size of 200 respondents who reside close to the Organic Food Store "Sreevatsa Organic Farm Products"and familiar with Organic Food Products by adopting multistage sampling technique. The null- hypothesis was tested for the socio-economic factors and willingness to purchase organic food products. The data collected were analysed using descriptive statistics, chi-square test, analysis of variance, Spearman's rank correlation and Friedman Test.

KEYWORDS
organic food products, willingness to purchase, cognitive and affective attitude.

INTRODUCTION
W hat we do to the earth we do to ourselves" or "We pass through the earth and the earth passes through us".

- Wendell Berry

Meeting the needs of the consumer is the primary challenge that every marketer faces. The relative importance of 'demand pull' from green consumers, or 'legislative push' from socio- environmental legislation various widely between different forms of market. In most markets the final consumer and the buyers within any marketing intermediaries, are an important influence on the greening process. Consumer behaviour is defined as the process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services (Laudon Dellabitta). Consumer behaviour refers to the behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they except will satisfy their needs. Consumer behaviour is the study of how individuals make decisions to spend their available resources like time, money and effort on consumption related items (Schiffman and Kanuck). Marketers saw increasing consumer interest in the environment as a marketing opportunity to target ecologically- concerned consumers. A number of businesses and industry groups have responded to environmental concerns by integrating environmental issues into their corporative polices.

Organic foods are made according to certain production standards. The National Organic Standards Board of the US Department of Agriculture (USDA) established a national standard for the term "Organic". Organic food must be produced without the use of sewer-sludge fertilizers, most synthetic fertilizers and pesticides, genetic engineering (biotechnology), growth hormones, irradiation and antibiotics. Environmental Marketing is based on three principles: social responsibility, the pursuit of sustainability and a holistic approach. It is open-ended, focuses strongly on the natural environment, has an intrinsic value and focuses on global concerns rather than those of particular societies.

SCOPE OF THE STUDY
The rationale for carrying out this study is that consideration for the environment could come only from well-informed citizens who are aware of, and fully committed to their rights to a quality health and environment. Nevertheless, before any behaviour can be changed, it is necessary to evaluate the current state of consumers awareness and knowledge. Therefore consumer's attitude, willingness to pay for organic food product and intention to purchase organic food will be the main agenda of this study.

STATEMENT OF THE PROBLEM
The present era is of mass production and mass distribution. The growth of competition amongst the producers of organic food products to capture markets has resulted in the invention of almost all kinds of organic food products. Effective awareness has become more in dispensable. In the modern commercial world all kinds of organic institutions find awareness as a suitable means of publicity. The marketers need to find answer, whether the attitude towards organic food product is positive and influences to buy organic food products and whether the socio economic profile helps the residents to buy organic food products.

OBJECTIVES OF THE STUDY
The main objective of this study is to understand the attitude of the consumers towards buying organic food products, specifically the study is trying:
a.   To study the association between socio-economic status of the respondents and their willing to purchase organic food products
b.   To gain knowledge about respondents attitude towards organic food products
c.   To suggest suitable measures for improving the marketability of Organic food products

HYPOTHESIS
Ho: there is no significant relationship between socio-economic variables and pleasure of eating organic food products.
Ho: there is no significant relationship between socio-economic factors and frequency of purchase of organic food products.

RESEARCH METHODOLOGY
Coimbatore city was selected as the area of the study owing to the reason that, it is the second biggest city in Tamil Nadu,India. It is an industrial hub with educated population, middle class, active environmental organization spreading awareness on environmental degradation at the pioneer stage guiding towards

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organic food consumption. More than 50,000 acres across the state have been brought under organic certification programme by Tamilnadu Organic Certification Department's efforts..The study covers the period of three months from January 2010 to March 2010. Primary data was collected using structured interview schedule. The Secondary data collected from government reports, publication, research reports, and books.

For this study, multistage random sampling techniques is used for selection of the 200 sample respondents. The sample is drawn from the sample unit namely the members of household drawn from the residential area located in the ward number 34 of North zone of Coimbatore Municipal Corporation where The Sreevatsa Organic Farm Products is located. The Sreevasta Organic Farm Products a speciality shop which deals with organically cultivated grains, pulses, edible oil, fruits, vegetables milk and milk products from organically fed cattles and also Organic manures. Familiarity of organic food products in the main criteria in sample selection. The collected data is analyzed with the help of statistical tools like Percentage analysis, Chi-square test and Scaling technique.

RESULTS AND DISCUSSION

The result of the study has been presented under the following headings:

SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS AND WILLINGNESS TO PURCHASE ORGANIC FOOD PRODUCTS

The analysis has been classified into the association between each of the socio-economic variables and its influence in purchase decision was analyzed by applying indexing to the opinion of the respondents. The socio economic variables used to reflect their willingness to buy the organic food products.

AGE

The various age groups of the respondents have a substantial effect to the market for organic food products. The readiness to purchase of the organic food products prevail among respondents within the age group of 20 to 30 years, who constitute 25.50 percent of the sample(table1). As the chi-square value (5.976) is lesser than the table value (7.81) at five percent level of significance, the null- hypothesis is accepted. It is proved that there exist no association between the age of the respondents and willingness to purchase.

GENDER

The female respondents (36.50 percent) and male respondents (31.50 percent) had the willingness to buy the organic food products(table2). Since, the chi-square value (0.301) is lesser than the table value (3.84) at five percent level of significance, the null-hypothesis accepted. There exist no association between the gender of the respondents and willingness to purchase of organic food products.

MARITAL STATUS

The respondents who are married (49.50 percent) and 18.50 percent who are unmarried were willing to buy the Organic food products. As the chi-square value (7.558) is the lesser than the table value (7.88) at five percent level of significance, the null- hypothesis accepted(table3). There is exist an association between the marital status of the respondents and readiness to buy the organic food products.

OCCUPATION

Occupation brings several contacts to an individual. The interaction with colleagues might influence the purchase of organic food products. The table 4 shows the willingness to purchase of organic food products with regard to occupation of the respondents. The majority of the respondents were home makers (16 percent) showed their willingness to purchase the organic food products forms the majority. As the Chi-square value (3.484) is the lesser than the table value (9.49) at five percent level of significance, the null-hypothesis accepted. There is exist no association between the occupation of the respondents and readiness to purchase of organic food products.

EDUCATION

The table 5 shows the willingness to purchase of organic food products and the education of the respondents. The majority of the respondents with higher level of education were willingness to buy organic food products, among them were graduates (27 percent) and post graduates (19.50 percent) The chi-square value (1.692) is lesser than the table value (7.81) at five percent level of significance, the null-hypothesis accepted. There exist no association between the education of the respondents and readiness to purchase of organic food products.

INCOME

It is understood from the table 6 that, about 16.50 percent of the respondents belongs to the income level of Rs. 10000 to 20000. The chi-square value (0.357) is lesser than the table value (9.49) at five percent level of significance; the null-hypothesis is accepted. There exist no association between the income level of the respondents and readiness to buy organic food products.

FOOD HABIT

Majority (29 percent) of the respondents with vegetarian food habit were eager to purchase the organic food products (table7). The chi-square value (6.756) is greater than the table value (5.99) at the five percent level of significance, the null-hypothesis accepted. There exist an association between the food habit of the respondents and willingness to purchase Organic Food Products.

PLEASURE IN EATING ORGANIC FOOD PRODUCTS

The association of socio-economic status of the respondents and pleasure of eating organic food products was analysed with null hypothesis (table 8). Since, the chi-square value is lesser than the table value at five percent level of significance, the null-hypothesis accepted. There exist no association between the socio economic profile of the respondents and pleasure of eating organic food products.

FREQUENCY OF PURCHASE OF ORGANIC FOOD PRODUCTS

The association tested between frequency of purchase of organic food products with regard to socio-economic factors of the respondents (table9),shows that the chi-square value is lesser than the table value at five percent level of significant, the null- hypothesis is accepted. There is no association between socio-economic factors of the respondents and frequency of purchase of organic food products.

To test the co-variability between the variables, spearman's rank correlation was used. The ranking of affective component of respondent's attitude towards organic foods products by employing spearman's rank correlation co-efficient is presented in table 10.

The table 11 reveals that, the following correlation co-efficient is found to be significant at one percent level and positively correlated. They were "Better taste" in organic food with "Ecological" and "Certification". The "Better for health" with "Better for animal", "Contains no dirt and bugs", "Better for farmers", "Very low yield", "Ecological", "Better quality", and Low calories".

Further, to find out the existence of association between the elements of organic food products and liking of the respondents the Friedman test was employed.From the table 12 the mean ranking shows that the highest rank was assigned to "Ecological" benefits of the organic food followed by the "very low yield", "Free from harmful substances" and the variable "Expensive" were influenced the attitude of respondents. Since, the calculated chi-square value (7.93) is lesser than the critical value (32.9) at five percent level of significance there exist an association between the various elements of associated with organic food products and their influence in purchase decision of the respondents.

FINDINGS

BEHAVIOURAL COMPONENT OF RESPONDENT'S ATTITUDE

Association between socio-Economic variables, purchase behaviour and its influence on purchase decision of Organic food products by the Respondents

AGE OF THE RESPONDENTS

❖   Majority of the respondents with the age group of 20-30 years were ready to the purchase the organic food products.

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GENDER

- ❖ In general, the willingness to purchase of the organic food products was found high among female respondents.
- ❖ Among the male respondents 13.50 percent were not ready to purchase of the organic food products.
- ❖ There is no association between the gender of the respondents and willingness to purchase of organic food products.

MARITAL STATUS

- ❖ The willingness to purchase Organic food products was maximum among married respondents.
- ❖ Among unmarried respondents, a considerable percentage of respondents were not ready to purchase of organic food products.
- ❖ There is no association between the marital status of the respondents and ready to purchase of Organic food products.

OCCUPATION

- ❖ The willingness to purchase of the organic food products was found comparatively high among homemakers.
- ❖ The association was not found between the occupation of the respondents and willingness to purchase of organic food products.

EDUCATION

- ❖ No association was found between education and the willingness to purchase of the organic food products
- ❖ The ready to purchase Organic food products was high among the Graduates and Post graduates, whereas it was low among the respondents with primary education.

INCOME

- ❖ Respondents with income upto Rs.20,000 pm were willingness to purchase of Organic food products.
- ❖ There exist no association between the income of the respondents and willingness to purchase of organic food products.

FOOD HABIT

- ❖ The willingness to purchase organic food products was maximum among vegetarian.
- ❖ There exists an association between the Food habit of the respondents and eager to purchase of organic food products.

PLEASURE IN EATING ORGANIC FOOD PRODUCTS

- ❖ There is no association between socio economic profile of the respondents and the pleasure of eating organic food products.

FREQUENCY OF PURCHASE

- ❖ There is no association between socio economic profile of the respondents and the frequency of purchase.

ANALYSIS OF ATTITUDE OF RESPONDENTS TOWARD ORGANIC FOOD PRODUCTS

AFFECTIVE COMPONENT OF RESPONDENTS ATTITUDE TOWARDS PURCHASE OF ORGANIC FOOD PRODUCTS

- ❖ Majority of the respondents assigned first rank to better taste, and better for health and sixth rank to very low yield and seventh rank to better for farmers.

=>The Spearman rank correlation revealed that the following correlation co-efficient is found to be significant at one percent level and positively correlated.

- ❖ They were better taste of organic food with Ecological and certification.
- ❖ The better health with better for animal contains no dirt and bugs, better for the environment, better for farmers, free from harmful substances, better quality and certification.

=>The mean ranking by fisherman's two way analysis showed that the highest rank was assigned to ecological, benefits of the organic food followed by the very low yields, free from harmful substance and expensive were influenced the purchase decision of the respondents.

COGNITIVE COMPONENT OF RESPONDENTS ATTITUDE TOWARDS PURCHASE OF ORGANIC FOOD PRODUCTS

Cognitive aspect of attitude is analysed for the reason for not buying organic food products.

The purchase organic food product was restricted mainly due to "Time constraints" and "convenience to get Organic food".

=>The Spearman's rank correlation revealed that the following correlation co-efficient were found to be significant at one percent level and positively correlated.

- ❖ The respondents never bought organic food products as it was too expensive and they did not have the habit of eating Organic food cereals.
- ❖ It will not available where they shop.

=> The mean ranking by Friedman's two way analysis showed that the highest rank was assigned to the reason that they haven't noticed, preferred other cereals, no habit of eat organic cereals no care about "organic", were the reasons for not buy organic food products by the respondents.

- ❖ There exists an association between the ranking of never buying the organic food products by respondents.

SUGGESTIONS TO MARKETERS OF ORGANIC FOOD PRODUCTS

The following are the suggestion made to the marketers of Organic food products based on the results of the study.

- ⇨ Sustained improvement in product features would lead to increase in consumption of organic food products.
- ⇨ The increase frequency of viewing the advertisement of organic food products and better taste would influence the purchase organic food products. The influence of advertisement of organic food products with an increase in education found particularly among graduates.
- ⇨ To persuade to buy organic good products, the variables like familiarity, personal ideology, social interaction and monitory cost and habits had greater influence in buying organic food products.
- ⇨ The familiarity of the organic food products among customers depends on the promotional efforts of the marketers. The availability organic food products need wider advertisement.
- ⇨ Allocation of separate shelves for organic food products in departmental stores
- ⇨ Positioning organic food products by their specific attributes
- ⇨ Positioning organic food products by influencing consumer beliefs about the benefits they derive on consuming.
- ⇨ Positioning by reputation for quality "only organic".
- ⇨ The attitudes of "never buying" could be modified by educating consumers on the benefits of organic food products.
- ⇨ The price premium is the major hindrance for non-buying of organic food products. The customers need motivation to buy even with a small price premium than to just avoid on one hand and the cost of cultivation and cost of marketing to be brought under check on the other hand.
- ⇨ The products initially should be made available in prominent market places and also gradually, in all the shops.
- ⇨ Education programme on Environment and the benefits of organic farming and consumption of organic food products will make the consumers more environmentally conscious "Green Consumer".
- ⇨ "organic" to be promoted as "the way of life" them considering it as "product".
- ⇨ The agriculture marketing and co-operative departments to help farmers get a good price for organic produce.
- ⇨ Ensuring quality of organic by farmers through certification by the Tamilnadu Organic Certification Department, which help them get a good price.
- ⇨ Demand creation large-scale production and availability of organic food products should go hand in hand. According a more responsible advertisement can play a positive and beneficial role in bringing out a desirable among homemakers in Organic food products market.

CONCLUSION

Consumer behaviour plays a major role in Organic food products segment. The marketers of organic foods need to be innovative and dynamic in order to complete with the changing purchase behaviour in the Organic food products market among urban residents. The importance of organic food products was ignored for quite a long period. As results of environmental sustainability, importance is shifted towards Organic food products rather than conventional

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farming. The study brought out the fact that the people were well aware of images and availability, but not loyal entirely too organic food products. The respondent without doubt attracted towards Organic food products. So the marketers must create promotions which are both realistic and moral and the product availability in terms of volume and variety are required to become successful in marketing organic food products.

SCOPE FOR FURTHER RESEARCH
❖ A similar study could be attempted with the rural household.
❖ Assessment study on consumer behaviour of Organic food products so as to enhance its market share.
❖ Influence of advertisement in the preference for organic food products could be attempted.
❖ A study on ways and means of increasing the market for organic food products could be undertaken.
❖ Assessment of consumer attitude with regard to organic food products.

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TABLES

TABLE 1: AGE OF THE RESPONDENTS AND WILLINGNESS TO BUY OF ORGANIC FOOD PRODUCTS

Age (in years)	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
20-30	11.00	8.00	19.00
30-40	30.50	10.00	49.50
40-50	13.00	2.00	15.00
50-60	10.00	6.50	16.50
Total	68.00	32.00	100.00
Chi-square value: 5.976, Df:3, Prob: 0.1128			

Source: Primary data

TABLE 2: GENDER OF THE RESPONDENTS AND WILLINGNESS TO PURCHASE ORGANIC FOOD PRODUCTS

Gender	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Male	31.50	13.50	45.00
Female	36.50	18.50	55.00
Total	68.00	32.00	100.00
Chi-square value : 0.301, Df:1, Prob:0.583			

Source: Primary data

TABLE 3: MARITAL STATUS OF THE RESPONDENTS AND PURCHASE WILLINGNESS TOWARDS ORGANIC FOOD PRODUCTS

Marital Status	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Married	49.50	17.00	66.50
Unmarried	18.50	15.00	33.50
Total	68.00	32.00	100.00
Chi-square value : 7.558, Df:1, Prob:5.975E-03			

Source: Primary data

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TABLE 4: OCCUPATION OF THE RESPONDENTS AND WILLINGNESS TO BUY ORGANIC FOOD PRODUCTS

Occupation	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Self employed	14.00	4.50	18.50
Employed	14.00	8.50	22.50
Casual Labour	14.50	5.00	19.50
Students	9.50	4.00	13.50
Home makers	16.00	1.00	26.00
Total	68.00	32.00	100.00
Chi-square value : 3.484, Df:4, Prob:0.4803			

Source: Primary data

TABLE 5: EDUCATION OF THE RESPONDENTS AND PURCHASE WILLINGNESS TOWARDS ORGANIC FOOD PRODUCTS

Education	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Primary	13.50	7.50	21.00
Higher secondary	8.00	2.00	10.00
Graduate	27.00	12.50	39.50
Post Graduate	19.50	10.00	29.50
Total	68.00	32.00	100.00
Chi-square value: 1.692. Df: 3, Prob: 0.6387			

Source: Primary data

TABLE 6: WILLINGNESS TO BUY ORGANIC FOOD PRODUCTS

Income (in Rupees)	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Below 10,000	7.50	3.50	11.00
10,000-20,000	16.50	8.00	24.50
20,000-30,000	7.50	3.50	11.00
Above 30,000	33.00	5.50	38.50
Nil	8.00	7.00	15.00
Total	68.00	32.00	100.00
Chi-square value : 0.357, Df:4, Prob: 0.9858			

Source: Primary data.

TABLE 7: FOOD HABIT AND WILLINGNESS TO PURCHASE ORGANIC FOOD PRODUCTS

Food Habit	Willingness to purchase of organic food products		
	Percentage of the respondents		
	Yes	No	Total
Vegetarian	29.00	11.00	40.00
Mostly vegetarian	22.50	7.50	30.00
Not vegetarian	16.50	13.50	30.00
Total	68.00	32.00	100.00
Chi-square value: 6.756, Df: 2, Prob: 0.0341			

Source: Primary data

TABLE 8: PLEASURE IN EATING ORGANIC FOOD PRODUCTS

Socio-Economic Variables	Chi- Square value	Degree of freedom	Table Value	Results
Age	3.800	3	7.81	Not significant
Gender	4.709	1	3.84	Significant
Marital Status	2.977	1	3.84	Not significant
Occupation	4.160	4	9.49	Not significant
Education	4.298	3	7.81	Not significant
Income	4.936	4	9.49	Not significant
Food habit	8.219	2	5.99	Significant

Source: Primary Data

TABLE 9: FREQUENCY OF PURCHASE OF ORGANIC FOOD PRODUCTS

Socio-Economic Factor	Chi-square value	Degree of freedom	Table Value	Results
Age	18.335	12	21.0	Not significant
Gender	0.777	4	9.49	Not significant
Marital Status	4.389	4	9.49	Not significant
Occupation	19.958	16	26.3	Not significant
Education	22.565	12	21.0	Not significant
Income	37.426	16	26.3	Not significant
Food habit	12.810	8	15.5	Not significant

Source: Primary Data

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TABLE 10: TEST OF CO-VARIABILITY ON AFFECTIVE COMPONENT OF THE RESPONDENTS ATTITUDE TOWARDS ORGANIC FOOD PRODUCTS (SPEARMAN'S RANK CORRELATION)

Elements	Better Taste	Better for health	Better for animal	Contains no dirt and bugs	Better for the environment	Expensive	Better for farmers	Very low yield	Ecological	Free from harmful substances	Better quality	Low Calories	Certification
Better Taste	1.000	.100	.010	.100	.000	.138	.065	.175*	.212**	.117	.024	.036	.273**
Better for health		1.000	.222**	.174*	.095	.121	.220**	.147*	.150*	.117	.311**	.289**	.007
Better for animal			1.000	.260**	.048	.008	.103	.030	.039	.039	.208**	.037	.145**
Contains no dirt and bugs				1.000	.113	.103	.241**	.025	.189**	.039	.121	.140*	.098
Better for the environment					1.000	.106	.101	.225**	.119	.063	.216**	.033	.158*
Expensive						1.000	.070	.142*	.002	.009	.124	.001	.173*
Better for farmers							1.000	.027	.032	.031	.207**	.019	.005
Very low yield								1.000	.093	.127	.097	.069	.073
Ecological									1.000	.039	.209**	.059	.069
Free from harmful substances										1.000	.023	.378**	.233**
Better quality											1.000	.189**	.017
Low Calories												1.000	.086
Certification													1.000

Source: Primary Data

* Significant at 5 percent level   ** significant at 1 percent level

TABLE 11: MEAN RANK OF AFFECTIVE COMPONENT OF THE RESPONDENTS ATTITUDE TOWARDS ORGANIC FOOD PRODUCTS (FRIEDMAN TEST)

Variables	Mean Rank
Better Taste	2.74
Better for health	3.41
Better for animal	8.19
Contains no dirt and bugs	5.58
Better for the environment	8.13
Expensive	8.21
Better for farmers	6.65
Very low yield	8.48
Ecological	10.34
Free from harmful substances	8.23
Better quality	5.66
Low Calories	7.48
Certification	7.93
χ^2	727.019
Df	12

Source: Primary Data

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WOMEN-IS THEIR PERSPECTIVE REALLY CHANGED?
(A RESEARCH PAPER BASED ON WOMEN PERCEPTIONS ABOUT WOMEN)

DR. SUMAN NASA
ASSOCIATE PROFESSOR
DEPARTMENT OF COMMERCE
G.V.M.GIRLS COLLEGE
SONIPAT

ABSTRACT

The present research is an attempt to analyze the influence of fundamental thinking being developed in our society regarding want of male baby and increasing trends towards female feticide. Although education has brought about much a change in women's style of thinking, still she is not free from the shackles of cynicism. She still is highly insecure from the other woman. Giving birth to female child is not much a matter of pleasure for her as compared to a baby boy. After a grueling day at work she has to handle all the dual responsibilities which have added to the miseries of her life, so much so that those who are earning a meager amount feel that if they were men their life would have been much better off. Howsoever, modernized she may become; still most of her decisions are dependent on either family or other male members. Efforts have been made to carry an in depth analysis of society through collection of primary data from its various female segments.

KEYWORDS
feticide, women perceptions.

INTRODUCTION

A woman is the full circle. Within her is the power to create, nurture and transform.

--Diane Marie Child

Indian woman is just another name of sufferings and sacrifices. From the ages old, she is there to serve others in every manner possible, yet still struggling hard to attain her right to birth. The problems, challenges, apprehensions and all the ups and the downs that define the nuts and bolts of every family, moderately results in suppression of girl surviving in mother's fetus. Trapped between tradition and modernity, the educated woman has now raised her voice against this silent murder. Let's know to what extent this effort has become successful. Surely God created man before woman. But then you always make a rough draft before the final master piece.

The study mentioned is performed to find out the reasons behind decreasing female sex ratio in Haryana. Whether this reduction is society generated or women themselves are responsible for it? Has education become successful in bringing change in woman's ideology towards herself? To what extent status of women has improved? Is woman ready to own responsibilities of her owns?

OBJECTIVES AND HYPOTHESIS OF THE STUDY

The study aims at concentrating those fundamental factors, which influence women's opinions and beliefs prevailing in the society. In this direction the following objectives have been framed.

- To study the extent of women's likings towards female baby
- To explore the present status of women in the society
- To examine whether education has broadened the freedom level of women

For this following hypothesis were prepared

H_{01} Woman feels pride in being a woman

H_{02} Second daughter is always warmly accepted in the family

H_{03} Education has not changed woman's attitude towards problems

H_{04} Woman keenly wants to shoulder her parent's responsibility

H_{05} Being a female woman has missed nothing in her life

RESEARCH METHODOLOGY

Present study exploratory in nature was conducted with a random stratified sampling technique having a universe of 200 respondents. A survey was conducted, on the eve of women's day, in a girl's college of Haryana, where decreasing female sex ratio is becoming an alarming issue. The respondents included Principal, teaching faculty, non teaching staff members, forth class employees (including lady peons, sweepers etc.), female labor engaged in college on construction sites, management people and the most important category, students of the college. In short women from different walks of life were chosen for this survey. An attempt has been made to get more cognizant response of feelings of women through a questionnaire. The questions were related to the core information about woman, their perception about self, towards other women in life especially towards the girl child. The casual relationship between education level and thought process, financial structure and attitude towards life, urban/rural background and preference towards male child has been studied with the help of descriptive data consisting of suitable test statistics cross tabs and chi square test. To appraise the present scenario of women perspective in a lucid style, various aspects have been studied with the help of percentage analysis. There were many other questions asking their opinions about role of education in women upliftment and strengthening, the freedom enjoyed by a female in various decisions relating to her own life and social issues, her priorities in life and ultimately her satisfaction and feeling of proud, for being a woman.

Major classification of respondents was on the basis of their age, education level, financial structure & rural/urban background. 29% of respondents were between age group 18 to 25 years, 26% between 25 to 35 years, 30% between 35 to 45 years and 15% were above 45 years of age. Since there is direct positive correlation between education level and financial structure a merged group has been framed for analysis constituting 18% respondents under uneducated category entitled E_1, 22% studied up to 10th standard denoted as E_2, 35% pursuing for their graduate degree termed as E_3 and 25% post graduate and other known as E_4. 80 % of total universe is urban belt and rest 20 % belongs to rural background.

ANALYSIS AT A GLANCE

Since education plays a deciding role, level of education has primarily been taken for in-depth investigations. Woman with the help of education has tried to take off her dreams into new heights. Although in male dominant society it is not an easy job. The very first question of survey was related to self appraisal. It stated "How do you feel being a woman?" 72% respondents on an average from all categories answered it as 'Great'; 18% chose the option 'Gender makes no difference' to their identity and 10% ladies reported their lives as 'miserable' the third option. But when asked if their daughters/sisters were supposed to live life like them, would they be happy, a big no came. All of them wanted a better life for their younger ones indicating the facts that they don't want that the

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compromises and adjustments they did in their lives should ever come in the way of their younger ones. Further too cross examine the response when asked, Do you feel, if you were a man your life would have been better, the results were quite alarming. 60% of uneducated and 65% of respondents studied up to 10th opted for this option depicting the scenario that although these people have adjusted in their present lives yet they love the freedom, physical security and decision making rights enjoyed by the male members of society. They want to get rid of their miseries and enjoy their lives in the manner feeded in their subconscious regarding liberty of man.

TABLE 1.1: FEELINGS ABOUT BEING A WOMAN

Education level	Great	Average	Miserable
E_1	57%	28%	15%
E_2	75%	16%	9%
E_3	79%	14%	7%
E_4	80%	15%	5%

2nd & 3rd question of the study related to birth of girl child. Among 18 to 25 age group 90% girls showed a warm welcome to the birth of girl child including 100% of rural belt. Within 25 to 35 age group results were more or less the same. But results obtained from 35 to 45 age levels were quite shocking. More than 60% response (majority from urban belt) showed a special liking & priority of boy over girl, which is the major cause behind increasing imbalanced sex ratio. People of this age group need a good round of counseling to change their ideologies and to see a new way of thinking. Age group 45 and above again showed an overwhelming response for girl child giving an indication that coming grand mothers are having a broader vision resulting in welcome of girl child and control over female feticide. When cross checked, the amazing fact was that uneducated and low educated ladies and especially from rural background showed a positive response towards 2nd female child in the family. Yet more spread of education is needed to wipe out old myths, beliefs structured in their minds. Gender disparity manifests itself in various forms, the most obvious being the trend of continuously declining female ratio in the last few decades. Social stereotyping and violence at domestic and societal levels are some of other manifestations. Discrimination against girl children, adolescent girls and women persists in all part of country.

TABLE 1.2: 2ND DAUGHTER IN FAMILY

Education	Not required	Okay	Happy
E_1	23%	69%	8%
E_2	9%	75%	16%
E_3	7%	45%	48%
E_4	5%	47%	48%

Each & every woman surveyed admitted the importance of education in her life. Education makes a woman stronger & financially independent and awakens her for identity and recognition. Moreover an educated lady educates the generations and can contribute towards growth & welfare of society by nurturing good citizens for country. When women are supported & empowered, whole of society is benefited. Their families are healthier, more children go to school, and agricultural productivity improves resulting in increased income. In short communities become more resilient. Whether education helps a lady in planning her family is depicted with the help of table 1.3 which stated that on average 16% of respondents feel that it is just a myth that woman can have some decision in this regard. 8% have opinion that it is a male dominant society whereas 59% think that education had made women stronger and she actively and firmly plays a role in deciding size of her family although ratio is reduced to 30% in case of uneducated ladies whereas nearly 80% in case of highly educated ladies.

TABLE 1.3: ROLE OF EDUCATION IN FAMILY WAY

Education	MYTH	No change	Male dominance	Stronger woman
E_1	25%	28%	17%	30%
E_2	16%	30%	5%	49%
E_3	10%	8%	5%	77%
E_4	12%	5%	4%	79%

When asked about taking care of parents in their old age 16% respondents stated that society's trends don't allow parents to put any burden on daughters. 10%, on the other hand, narrated if brother was there, why they should opt for this responsibility? 13% expressed their inability due to non cooperation from their in-laws & family. 61% showed their keenness to shoulder responsibility of parents in their old age. It means girls themselves are coming forward to take this responsibility. This is a healthy sign of our society. Girls should be brought up in such a manner that they understand their responsibilities towards their parents who have brought them up in such a gorgeous manner bearing all discomforts and inconveniences at their own.

TABLE 1.4: SHOULDERING OF PARENTS RESPONSIBILITY

Education	Society trends	In-laws disliking	Brother will own	I am ready
E_1	27%	14%	14%	45%
E_2	18%	21%	8%	53%
E_3	13%	10%	10%	67%
E_4	6%	5%	8%	81%

Response for being a girl what they have missed, was full of pains. It is the increasing physical insecurity which has created terror in the minds of this segment of society. Rapid increase in crime rate, defective law & order scenario has ruined their freedom and liberty which was just born after a long struggle. One poor lady explained her unfortunate story of being sold as commodity in present times which really is a stigma & curse to modern educated society.

TABLE 1.5: THINGS MISSED BEING A WOMAN

Education	Love of parents	Freedom	Decision making	Nothing
E_1	14%	38%	42%	6%
E_2	20%	54%	22%	4%
E_3	8%	26%	51%	15%
E_4	4%	20%	40%	36%

FINDINGS

Results derived by applying chi square tests from data observed are mix of sugar and spice. Null hypothesis that woman herself enjoys & feels pride in being a woman is accepted as values observed are 12.44 which are within 5% and 1% level of significance. The basic reason behind this acceptance is that most of women are self contended and not much ambitious about their lives when taken personally. They are satisfied with their present status in society. The results drawn from percentages also confirm this fact. The second null hypothesis that 2nd daughter is warmly accepted in family is strongly rejected with values 88.533 at 5% and 1% level of significance. The results obtained show cruel and naked face of society which very proudly accepts the alternate hypothesis that male baby is strongly desired in majority of families in spite of increasing education level, good financial structure and urban background. The third null hypothesis is also rejected (56.672) giving strength to the fact that spread of education has changed women's vision towards problems and challenges faced in the society. The null hypothesis that woman wants to shoulder her parents responsibilities is also rejected with chi square values 24.552. Although while going through percentage study we find that ratio of shouldering responsibilities of parents by woman has increased in highly educated group yet most of the low educated and uneducated women are not seen much interested in this issue. They make themselves free from this responsibility, by taking excuse either of social norms or

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communicating it as accountability of brother. This is very surprising that woman take shield of her husband's and in-laws disliking in this issue but on the contrary she is very much ready to have equal rights in parents properties as well as in other matters. This dual standard is quite unfortunate. Female segment has to emerge as a strengthening power and role model of society. If she is escaping from her responsibilities, this is not a healthy sign. Being a woman, female has missed nothing in society is again absolutely rejected with values 84.295. The freedom, space and liberty enjoyed by males have always been a big dream for the lady. She is yet to discover her identity.

RECOMMENDATIONS

The study is basically focused on acceptance of female child in family. But the results found hereby show that situation is not very enthusiastic. Ladies themselves have strong desire to have male child in family. Woman herself is yet enemy of another woman. Female child is accepted warmly only after arrival of male baby. And the paradox is that it is the mother, grandmother, aunt and other female members who strongly desire male baby. May be the torture and exploitation faced by themselves and lack of personal space & financial liberty are the reasons behind this approach. But this issue needs a great concern and awareness from society**. A positive social and political approach in this regard can bring improvement to a larger extent. Spread of education can play a vital role in awakening our souls and improving the whole scenario as education has the capability to enlighten every nook and corner of a human**. Examples of successful daughters of India such as **Kalpana Chawla, Chanda Kochhar, Indiara Nooie, Saina Nehwal** etc should be cited so that society could be motivated and image of a new strengthened & powerful woman could be emerged. Women can also be motivated by using **inspirational quotes related to girl child and by condemning evil job of aborting daughters using excerpts from religious books** wherever necessary. As women are highly motivated and influenced by religious norms and rituals.

CONCLUSION

Man and woman are different, neither better nor worse. The only thing they have in common is that they belong to same species. They live in different worlds with different values and with different sets of rules. Every one knows it but very few are willing to accept it. The wheel of change always turns in the direction of what we put into our minds. This is the right time to bring change in our thought process to sustain our future generations. Let's not try to disturb nature's laws and abide by the rules made by God to run this universe.

May Almighty enlighten our path with the candle of knowledge!

APPENDIX

QUESTIONNAIRE

PERSONAL COLUMN
(PLEASE TICK THE RIGHT OPTION)
Name: _____
Educational Qualifications:
a)   Uneducated
b)   Up to 10th
c)   Up to Grad.
d)   P.G. & above
Age:
a)   18-25
b)   25-35
c)   35-45
d)   45 and above
Gender
a)   Male
b)   Female
Income: **(Per Month)**
a)   Dependent
b)   Upto 5,000
c)   5,000-10,000
d)   10,000-25,000
e)   25,000-above
Marital Status:
Married
Unmarried
Background
A)   Urban
           Rural
(Please tick the right choice)
Q 1:   How do you feel being a woman?
a)   Great
b)   Gender makes no difference
c)   Miserable
d)   Any other (Please specify)   _____

Q 2:   Do you think your daughter / sister should lead life just like you or there exist some dissatisfaction in your life due to a woman. Kindly explain?
_____

Q 3:   If you are expecting a Female daughter second time, honestly what will be your reaction in your heart?
a)   Hey Bhagwan Kya Ho Gaya
b)   Ishwar Ki Marzi, Jo Bhi De De Par Ek Beta Hota To Accha Tha
c)   Maza Aa Gaya Ab Ghar Me Meri Majority Hogi. Raj Karenge.
d)   Any other (Please specify) _____

Q 4:   Do you think educated woman is to some extent more independent in giving birth to Female child.
a)   No, it's a Myth.
b)   Woman herself wants a male baby.
c)   It's a male dominant society. No personal wish.

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d)   Yes, education has made women stronger.
e)   Any other (Please specify) _____
Q 5:   Normally in a family a woman is the biggest enemy of another woman. What do you think about it?
a)   Very right.
b)   Right to some extent.
c)   Totally disagree.

Q 6:   In normal families son is supposed to be care taker of his parents in their old age. Being a lady do you find yourself capable enough to shoulder this responsibility?
a)   Society's trends don't allow parents to put any burden on daughters.
b)   My husband and in-laws do not like this.
c)   When brother is there, it's his responsibility.
d)   Parents have brought me up in a gorgeous manner. I am and will, fulfill my responsibilities towards them, come what may.
e)   Any other (Please specify) _____

Q 7:   Do you think education is must for a woman because-
a)   Woman educates generations.
b)   Recognition and self identification.
c)   Good standard of living due to Job availability.
d)   Contribution to Society.
e)   All above.

Q 8:   Being a girl have you ever missed
a)   Love of your parents towards you.
b)   Freedom and rights given to your brother.
c)   Independent decision making.
d)   Any other (Please specify) _____

Q 9:   If your parents want you to get married at an early age what would be your reaction?
a)   You will oppose, as you want to first settle in your life.
b)   Okay, it has to happen one day.
c)   Parents are not your enemy.
d)   Any other (Please specify) _____

Q 10:   Should a woman stop dreaming about herself, her career and her ambitions after marriage, as family is her sole priority?
a)   No, she should nurture her own dreams.
b)   Husband and kids are always on top priority.
c)   Always compromising with the situations.

Q 11:   If woman gets a chance to take any initiative for the welfare and development of society what should she do?
a)   Move at her own to do what she feels right.
b)   Seek acceptance of family to move further.
c)   Communicate things to male members and ask them to do so.

Q 12:   Do you feel if you had been a man your life would have been better?
a)   Yes, I would be out from the miseries of my life.
b)   No, I am very much happy and contended with what I am.

THANK YOU

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TALENT MANAGEMENT: IMPORTANCE, PROCESS, RETENTION AND STRATEGIES FOR BUSINESS ORGANIZATION

DR. KUMUDHA
ASSOCIATE PROFESSOR
P. S. G. KRISHNAMMAL COLLEGE FOR WOMEN
DEPARTMENT OF BUSINESS MANAGEMENT
COIMBATORE

SENTHILKUMAR
ASST. PROFESSOR
DEPARTMENT OF MANAGEMENT STUDIES
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
YELAHANKA

ABSTRACT

The paper deals with the topic of talent management and is based upon the notion that employees, specifically their talents, are the company's core competitive talent management strategies are implemented the potential competitive advantage becomes real. Many companies strengthen their talent management strategies as they recognized that lack of their most precious employees might confine their future growth. Therefore, the most successful and admired companies offer great working conditions, climate and compensation packages. Even though employee retention is costly, talent departure and shortage puts companies in an even worse situation. Furthermore, talent retention issue becomes even more important when economy faces a temporary decline. To ensure that performance is discussed, recognized, rewarded, and understood appropriately, many organizations are focusing renewed efforts on performance management systems. Talent management is fast becoming a critical strategic objective for growing organizations. This responsibility represents an excellent opportunity to create value. The importance of hiring competent talent is evident in any direction. Talent is king – now and in the future. It is the last source of competitive advantage.

KEYWORDS

competition, company, performance, competitive advantage, retention, strategies, talent management.

INTRODUCTION

Several years of economic downturn and the highest unemployment rates might suggest that the battle for talent will not intensify, yet in reality in many employment categories demand for talented workforce outmatch supply. In this inconsistent world the company's success is restricted by how quickly they can access and deploy required knowledge at acceptable costs. Managing retention costs is a fundamental step towards more successful talent management practices and provides notable payoffs for organizations. This reinforces the argument to put workforce planning and talent management at the heart of business strategy and therefore get a bigger share in the senior management's time budget. The integration of talent management systems and their alignment with the business strategy is critical, yet today often still falls solely into the domain of Human Resources and Line Management, when it should actually be a part of corporate strategy managed by top management itself. The organizations nowadays are forced to tackle talent related issues earnestly. In order to pursue a leading market position it became necessary to develop and adapt their talent management practices to a fast changing Workplace.

The main goals of this paper are to better understand the challenges and the importance of talent management solutions in regard to retaining talented employees, in order to find space for improvements and to broaden the understanding of talent management and talent retention. Therefore, we introduce in the first chapter the meaning of talent management, its challenges and its growing importance. In the second chapter, we further discuss the significance of talent retention and the impact of talent departure on the organization. We further present drivers of talent retention crisis, general reasons why people choose to remain with or leave an organization as well as challenges, costs and payoffs of talent retention solutions. In the last, fourth chapter we shortly introduce the

TALENT MANAGEMENT

What is talent management?

Lewis and Heckman (2006, p. 139) conducted an extensive and critical review of the talent management literature both in the professional and academic press and found a "disturbing lack of clarity" concerning its definition. They did, however, identify three primary conceptions of the term. The first is that talent management is comprised of "a collection of typical human resource department practices, such as recruiting, selection, development and career and succession management" (p. 140). From this perspective, they argued that talent management may be little more than a trendy term or euphemism for HRM. However, they also suggested that talent management may additionally imply a systems approach to carrying out these functions; one that involves technology (e.g. the internet or software) and takes place at the level of the whole enterprise.

Lewis and Heckman's (2006) second conception of talent management more specifically focuses on predicting or modeling (in support of managing) the flow of human resources throughout the organization, based on such factors as workforce skills, supply and demand, and growth and attrition. From this perspective, talent management is considered more or less synonymous with human resource or workforce planning, particularly if automated and connected with other organizational databases and systems.

The third and final perspective on talent management identified by Lewis and Heckman (2006) focuses on sourcing, developing and rewarding employee talent. Many HRM practitioner publications advocate the differential treatment of employees identified as having exceptional talent (i.e. high potential or high performing employees). This perspective was reflected in a recent Conference Board report in which talent was defined as "individuals who have the capability to make a significant difference to the current and future performance of the company" (Morton, 2004, p. 6).

Proponents of this perspective typically refer to case study and other anecdotal forms of evidence, in which organizations pursuing this approach reportedly realize gains in sales and profitability. This was the case in the work of Handfield-Jones et al. (2001), the efficacy of which was later discounted (Lewis and Heckman, 2006), when the improvements in bottom line results proved to be temporary, despite an ongoing commitment to talent in the organization. Others endorse an undifferentiated approach, in which the objective of the HRM function is to maximize the talent of all employees or as suggested by Buckingham and Vosburgh (2001, p. 17), the "talent inherent in each person, one individual at a time". Providing support for this perspective Pfeffer (2001) argued that an exclusive focus on the external recruitment and retention of "high talent" senior executives could have unintended negative organizational consequences. These he identified as including increased internal competition thus undermining teamwork; the undervaluing of existing employees leading to increased turnover; the creation of a self-fulfilling prophecy of declining competence, whereby training and development resources are redirected from struggling employees to those

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most able; a focus on bringing in new talent instead of fixing cultural and other systemic issues that serve as barriers to employee performance; and the development of a culture of organizational arrogance or invincibility, potentially leading to poor decision making.

Lewis and Heckman (2006, p. 141) criticize each of the three perspectives they identified – talent management as automated and enterprise-wide HRM, talent management as automated and enterprise-wide workforce planning, and talent management as policies and practices geared towards maximizing employee talent (of few or many). The first perspective is criticized on the basis that it is "superfluous" or little more than the "rebranding" of HRM. The second is similarly criticized as "it provides no incremental understanding [to the HR planning function] and is therefore unnecessary" (p. 141). Finally, the third perspective is seen as the most problematic, given the contradictory positions that are presented (i.e. a focus on a select few versus all employees). Further, arguments in favour of one position or the other are largely based on "compelling anecdotes" (p. 141); little rigorous data is available to support either perspective.

Lewis and Heckman (2006, p. 143) conclude that talent management "is not well grounded in research, not distinct from traditional HR practices or disciplines, and is supported mainly be anecdote". In response to this conclusion they advocate research that more rigorously and directly explores the link between various talent management or HRM practices and organizational outcomes as well the adoption of a strategic orientation.

While concurring with Lewis and Heckman's (2006) categorizations, we suggest here that an important thread that runs through all three conceptions described above, plus the strategic orientation they ultimately suggest, is a sense of urgency that is associated with the "war for talent", a phrase first coined in a 1998 research report by McKinsey Consultants (Chambers, 1998). In addition, within organizations that have declared their commitment to talent management, a sense of "passion", and "pride" can be found amongst those responsible for its implementation (Morton, 2005, p. 25). According to case study evidence (Morton, 2004, 2005), these organizations "get it"; there is a predominant mindset that human resources are the organization's most important asset and primary source of competitive advantage.

As suggested by Lewis and Heckman (2006), many of the policies and practices underlying talent management are synonymous with various components of HRM (e.g. recruitment, selection, compensation, performance management, development, succession planning). Talent management additionally implies a level of strategic integration (i.e. a set of talent management activities that are integrated and aligned with internal organizational systems and external environmental factors), sophistication (i.e. the development of integrated data management and information systems) and broad-based accountability (for all managers and supervisors) that HRM has traditionally not engendered (in practice if not in theory). In this way, talent management presents the opportunity to elevate the practice of HRM to its theoretical potential, with evidence, shared responsibility and a supportive culture being key cornerstones of its practice.

Finally, given the essential role of human resource managers in developing, launching, facilitating and tracking talent management efforts and systems, an organizational commitment to talent management also has the potential to elevate the role of HR practitioners to strategic partner. "This kind of strategic business partnering further refines HR's role from being transactional to one that is more essential to the business" (Morton, 2005, p. 13). Talent management is therefore arguably being positioned by some as the latest weapon in the HRM arsenal, in the ongoing struggle to elevate the practice of HRM to one of strategic importance.

In summary, talent management is a multi-faceted concept that has been championed by HR practitioners, fueled by the war for talent and built on the foundations of strategic HRM. It may be viewed as an organizational mindset or culture in which employees are truly valued; a source of competitive advantage; an effectively integrated and enterprise-wide set of sophisticated, technology enabled, evidence-based HRM policies and practices; and an opportunity to elevate the role of HR practitioners to one of strategic partner. Talent management is therefore defined here as both a philosophy and a practice. It is both an espoused and enacted commitment – shared at the highest levels and throughout the organization by all those in managerial and supervisory positions – to implementing an integrated, strategic and technology enabled approach to HRM, with a particular focus on human resource planning, including employee recruitment, retention, development and succession practices, ideally for all employees but especially for those identified as having high potential or in key positions. This commitment stems in part from the widely shared belief and explicit recognition that human resources are an organization's primary source of competitive advantage; an essential asset that is becoming an increasingly short supply.

THEORETICAL UNDERPINNINGS OF TALENT MANAGEMENT AND ITS STRATEGIC IMPORTANCE

Talent management (TM) is fast becoming a critical strategic objective for growing organizations. "In a slow or down economy, an intense talent shortage may be difficult to visualize, yet what we know about economic cycles and demographic trends forces us to confront a not-too-distant future that includes a labor/talent deficit in supply/demand" (Frank & Taylor, 2004, p. 40). It is one of the most important strategic objectives of organizations today that in the long term bring success, consistency and efficiency. It is seen as a key strategy in maintaining a competitive advantage and an excellent opportunity to create value. Talent is king today and in the future and the last source of competitive advantage (Phillips & Edwards, 2009, p. 24).

Talent has a critical role in the organizational success for the following reasons. **Talent adds to the market value, executed the ideas and is the last source of competitive advantage**.

Further, the most successful and admired companies offer great workplaces that attract and retain talent. Cost of competent talent and its turnover is high but we cannot be successful without it. Moreover, the competitive environment has created a retention crisis that can be managed (Phillips & Edwards, 2009, p. 7) Frank and Taylor (2004, p. 40) draw a conclusion about how the future of TM is going to depend on embracement and leveraging of connectedness. The upcoming demographically driven labour shortage will continue the battle for talent therefore attracting, motivating and retaining talent shall become the highest priority and shall take all of the energy and creativity organization can master.

TM is a new way to organizational effectiveness combining the strategic approaches of Human Resources (HR) and business-planning resulting in improved performance, employee potential, strategy execution and operational excellence. If matching the right people with the right roles at the right time is well known to human resource professionals and done effectively it creates long-term organizational success (Ashton & Morton, 2005, p. 28). Blass (2007, p. 3) defined TM as "the additional management processes and opportunities that are made available to people in the organization who are considered to be "talent" Phillips and Edwards (2009, p. 27) referred talent to employees in critical jobs that "are important to the success of the organization and […] can make a significant difference in organizational performance" whereas TM is best seen as a mindset, set of tools and technologies helping organizations making good decisions about talented individuals playing an important role in the success of the company (Creelman, 2004, p. 3).

Blass (2007, p. 3) deduced that every organization has its own TM system, as there is always something that happens with talented people once they have entered the company. Either "they are being developed and motivated or they are being stifled and neglected in terms of development opportunities". Key findings of his research were that in the United Kingdom there are 50 percent of organizations where management recognized some form of TM, 35 percent think they do not have any and remaining 15 percent simply do not know. Further, 84 percent of managers in United Kingdom want to be considered as high potential whereas 60 percent agreed that those identified as talent were expected to become senior managers.

THE GROWING CHALLENGES OF THE TALENT MANAGEMENT

The major external and internal factors, which are causing talent crisis and influencing the need for talent and its management, are discussed in the following paragraphs. In 2006 real wages in United States (U.S.) started to escalate, which is a major market evidence of growing shortage of the skills and knowledge that companies demand to compete in dynamic global markets (Echols, 2007). According to Dodd (2009) organizations are experiencing skill gaps and talent shortages across all functional areas, industries and geographic locations. Moreover one in five companies established in U.S. will lose over 40 percent of their top level talent within the next 5 years. Grantham and Patel argued that the shortage of skilled workers will become more pronounced and globalization of the workforce is leading to a greater need to compete effectively in the battle for talent (as cited in Frank & Taylor, 2004, p. 37).

- **THE AGING WORKFORCE**

Nearly half of all U.S. adults will be older than 55 by 2020. By 2010, the number of people between 55-64 years old is expected to increase over 50 percent due to aging of the baby boomers, while the number of people aging from 35 to 44 will decrease by almost 20 percent. In only a decade the number of workers older than 55 has grown by 23 percent and will reach 73 percent increase by 2025. Older ranks of the workforce are obviously compounded by contraction of the younger ranks. Global companies can expect a similar demographic shift in their workforces on multiple fronts (Rappaport, Bancroft, Okum, 2003, p. 55).

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- **SKILL SHORTAGES**

Aerospace and defense, utilities, health care, insurances and financial services "face the imminent threat of a "brain drain" as aging, experienced workers approach retirement and too few younger professionals are choosing jobs in these industries" (Rappaport et al., 2003, p. 56). "As baby boomers retire, taking their skills, knowledge and experience with them, they will leave a gaping hole that has to be filled by a smaller population of merging leaders now in the 25- to 44- year-old group" (Echols, 2007, para. 9). "Further, young people entering the workforce have expectations, priorities, temperaments and work styles that differ from older generations [...] these new workers lack the industry specific experience of the senior employees they will replace, as well as the business skills and professional wisdom that requires years of real-world exposure" (Dodd, 2009, para. 4, 6). A survey conducted by Guthridge, Komm and Lawson (2008, p. 51) implies that the Generation Y (born after 1980) influenced by changes in technology, internet and information overload is a very particular demographic challenge. This generation demands more flexibility, more meaningful jobs, higher rewards, better work-life balances and more professional freedom in comparison to older employees. Today they are representing 12 percent of the U.S. workforce and are substantially harder to manage than its predecessors.

- **THE RISE OF KNOWLEDGE WORKERS AND GLOBALIZATION**

Besides mutable economy, labor and talent shortages, technology has also been contributing to the crisis, enabling employees to become considerably more knowledgeable and sophisticated about employment and job searches making organizations more vulnerable to employee turnover (Hansen, 2001, p. 8). According to Guthridge et al. (2008, p. 53), knowledge workers create up to three times higher profit and at the same time because of their work require minimal oversight comparing to other employees. Technology supporting their work has also created faster and better ways to share information, further driving the demand for such workers. Another challenge for companies expanding in new international or emerging markets is coming from globalization. Organizations must have executives willing and be able to work abroad, they require talented local people, with an international mind-set, who understand local ways of doing business and local consumers in order to be successful in these markets (Guthridge et al., 2008, p. 52). As no other global trend in the recent years was considered as significant as competition for talent, companies started to invest heavily in the implementation of HR processes and systems. Nevertheless, TM is still considered as a short-term problem rather than as an integral part of a long-term business strategy. There are two obvious reasons for that. First, shareholders and investors continue to look at the short-term performance whereas secondly managers mostly hire additional people on a short-term and short-notice (Guthridge et al., 2008). The McKinsey Quarterly research (2008, p. 53) has highlighted obstacles that executives face on their way to good TM. Short-term mind-sets, talent sharing, minimal collaboration among business units as well as unclear role of the HR professionals and ineffective line management were listed as the most critical. Moreover investments in talent are expensed rather than capitalized resulting in managers cutting expenditures for employee development in order to perform better short-term earnings.

TALENT RETENTION
SIGNIFICANCE OF TALENT RETENTION
It is important to understand the basic distinction between retention and turnover to establish the appropriate framework. **Retention** "is the percent of employees remaining in the organization" where high levels are desired. [...] **Turnover** is the opposite of retention. It "refers to the percent of employees leaving the organization for whatever reason(s). "Avoidable" turnover is distinguished from "unavoidable" so that the proper emphasis can be placed on the avoidable portion" (Phillips & Edwards, 2009, p. 27).

Past indications that employees will be leaving in droves as the economy improves happened to be true as 83 percent of surveyed employees said it was likely they would actively seek new employment once the job market and economy improved (Frank & Taylor, 2004, p. 38). McKinsey research (2008, p. 49) reveals that 75 percent of corporate officers were concerned about talent shortages and Deloitte (2007, p. 2) reports that retaining the best talent is a top priority for 87 percent of surveyed HR directors. McKinsey Quarterly survey (2008, p. 50) of more than 1,300 executives concluded that finding talented people would be the single most important preoccupation for the rest of this decade.

Capelli (2000, p. 104) draws a conclusion that "The old goal of HR management – to minimize overall employee turnover – needs to be replaced by a new goal: to influence who leaves and when. [...] Managing employee retention in the past was akin to tending a dam that keeps a reservoir in place, today it is more like managing a river. The object is not to prevent water from flowing out but to control its direction and its speed".

According to Armstrong (2006, p. 398) "A retention strategy takes into account the particular retention issues the organization is facing and sets out ways in which these issues can be dealt with". Also Phillips and Edwards (2009, p. 29) conclude that talent retention issue becomes even more important when economy faces a temporary decline. Most experts and executives that focus on the long view, provide three rules to stress the importance of recruiting quality talent during a downturn. First, avoid the lay-off of key talent at all costs, second to keep recruiting and ensuring that talent channels are open and third to maintain talent development programs.

TALENT FLUCTUATION AND ORGANIZATIONAL CONSEQUENCES
People leave an organization if one or more of the following situations occur; company's leadership shifts, conflicts with immediate supervisors, close friends sleave and an unfavorable change of responsibilities arise. People may leave when relationship with their immediate bosses becomes stressful or new leaders, whom employees do not yet trusts, take the lead. Major part of affiliation to the company may be taken away when one or more colleagues leave the organization as well as job that no longer appeal to employee interests (HBE, 2002, p. 77, 2004, p. 49). People stay with an organization for many different reasons; from job security, work culture to flexible hours and work-life balance, so do they leave the company for many different reasons; primarily because some of the conditions to stay were absent. Pride in the organization, a respected supervisor, fair compensation, affiliation and meaningful work are the five major reasons that convinces people to stay with the company. People want to work for well-managed companies with respectful and supportive supervisors who are able to motivate others. Moreover, they want to work for companies that offer competitive wages besides opportunities to learn and grow and finally, to be able working in the field that appeal to their deepest interests. (HBE, 2002, p. 75, 2004, p. 47)

Five major negative consequences from perspective of the organization as well as employees are (Table 1) implicating that consequences of high turnover are significant and costly and connected with many intangible benefits associated with turnover reduction solutions. Harvard Business Essentials (2004, p. 84) estimate a turnover cost of about one-third the new person's salary while among managerial employees estimates are in the range of one to two times the departing employee's annual salary including costs of recruiting, interviewing, and training replacement, effect on workload and morale, customer satisfaction and last but not least is the loss of knowledge.

TABLE 1: TOP 5 NEGATIVE IMPACTS OF TALENT DEPARTURE ON THE ORGANIZATION AND INDIVIDUAL

ORGANIZATION	INDIVIDUAL
High financial cost	Loss of employee benefits of job seniority
Survival is an issue	Stress associated with the transition and change
Exit problems and issues	Financial difficulties
Productivity losses and workflow interruptions	Loss of social network
Service quality drops	Relocating costs

Source: J. J. Phillips & L. Edwards, 2009

According to Srivastava (2008, p. 4) employee dissatisfaction with the organization was the ultimate reason to leave and decided to quit. He believed that a dissatisfied employee is worse than not having an employee at all as he does more harm than good to the organization. He spreads dissatisfaction to other employees, does not do his work up to the mark and sets a bad example for other members of the organization.

DRIVERS OF TALENT RETENTION CRISIS AND TURNOVER COSTS
There are several internal and external factors driving the talent retention crisis (Table 2) collectively providing a tremendous challenge for organizations to manage employee retention. Most of the external problems outlined below are in a large extent out of the employer's control and will most likely get worse (Phillips & Edwards, 2009, p. 34).

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TABLE 2: TOP 5 INTERNAL AND EXTERNAL DRIVERS OF TALENT RETENTION CRISES

INTERNAL	EXTERNAL
Lack of company loyalty	Economic growth
The desire to have challenging and useful work	Slower growth of job seekers
The need for autonomy, flexibility, and independence	Unemployment rate at low levels
The need to have rewards based on performance	Shortage of special skills
The need to be recognized for participation,	Entrepreneurship accomplishments and contributions

Source: J. J. Phillips & L. Edwards, 2009

The difference in the job growth rate and the workforce growth rate will cause a global Shortfall in the future as birth rates are lower and baby boomers, most of them in critical jobs, are retiring early. On the other hand internal changes in organizations drive excessive talent departure along with external influences caused mainly by structural changes as well as employees` behavior towards work and their employers (Phillips & Edwards, 2009, p. 34).

The cost of unwanted departure of talent can be catastrophic therefore managing the cost is an essential step in managing retention. The value of the turnover cost varies with the job and may reach up to three times annual compensation value for the departure of a software designer, or one and a half times of annual compensation for a sales representative (HBE, 2004, p. 46). Table 3 summarizes the costs of turnover according to job type in a range of a percent of annual salary.

TABLE 3: TURNOVER COSTS SUMMARY

Job Type / Category	Turnover Cost Ranges as a Percent of Annual Wage/Salary
Entry Level – Hourly, Non-Skilled	30 to 50
Service / Production Worker – Hourly	40 to 70
Skilled Hourly	75 to 100
Clerical / Administrative	50 to 80
Professional	75 to 125
Technical	100 to 150
Engineers	200 to 300
Specialists	200 to 400
Supervisors / Team Leaders	100 to 130
Middle Managers	125 to 200

Percentages are rounded to reflect the general range of costs from studies. Costs are fully loaded to include all of the costs of replacing an employee and bringing him or her to the level of productivity and efficiency of the former employee.

Source: J. J. Phillips & L. Edwards, 2009

TALENT MANAGEMENT STRATEGY

It was realized that realizing strategic vision through human resource shall begin at assessment of talent needs of business. Through the talent assessment it has mapped out Competencies relevant globally in this new environment which it needs to harness and develop. It is now investing in competency based talent recruitment and creation, creating environments, evolving appropriate management styles and developing their leadership pipeline to compete globally.

Talent acquisition and management strategy

The talent acquisition and management strategy involved:

1. Defining the competency framework relevant for the organizational growth:

* For the senior management (refer Figure 1).

* For the middle managers (refer Figure 2).

2. In-depth talent assessment based on competency framework for:

*new hires;

* existing employees.

FIGURE 1

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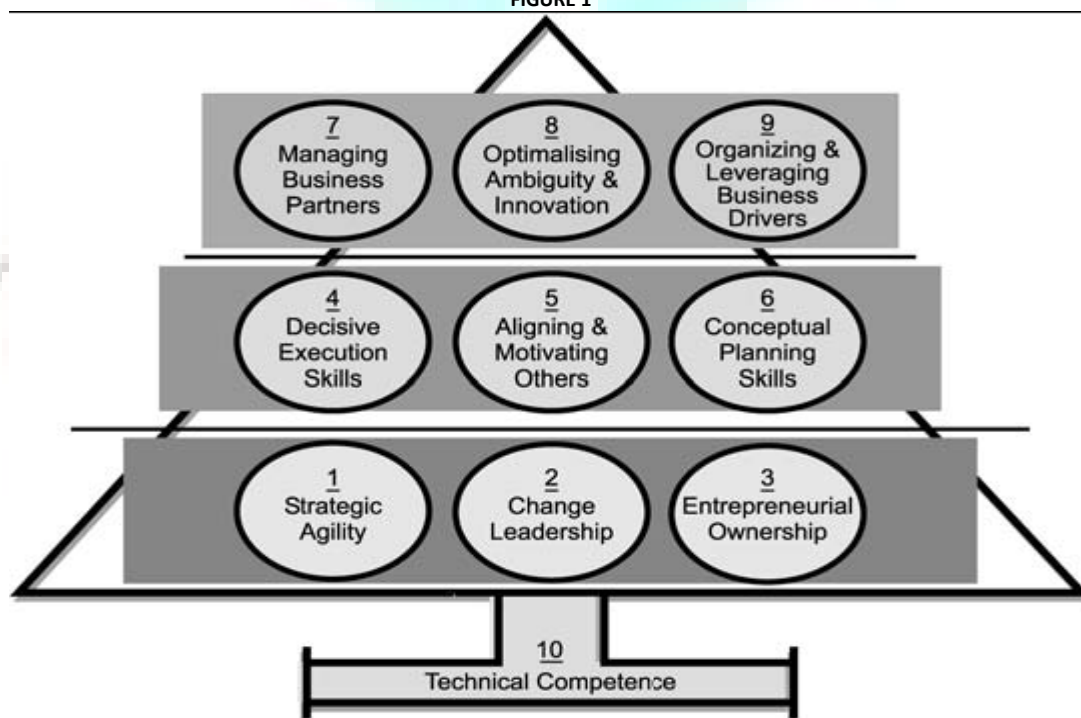
FIGURE 2

3. Identifying lynchpin positions as per the current organizational strategy:
* Classification in terms of ''cannot afford to lose'', ''Critical now'' and ''Can go''
4. Making sure that the ''cannot afford to lose'', ''Critical now'' resources are not leaving – making position attractive through:
* development focus;
* challenging assignments;
* fast track growth;
* higher education sponsorships, etc.
The organization adopted the following learning strategies based on the talent type:
1. Executive coaching for approximately 12 key middle management positions.
2. Formal training:
* for building management and leadership skills;
* for enhancing the problem solving and analytical skills;
* others, based on the development need analysis.
3. Provided job enrichment opportunities for high potential individuals.
4. On the job projects and stretch assignment opportunities to valued and top talent.
To make the learning happen, the projects and the special stretch assignments were linked
to the business strategies and were integrated into the individual's goals. Therefore,
evaluation and rewards got built into the process and refer the below figure
The above talent acquisition and talent management initiative has been operating for the
past 15 months. The organization has witnessed the following phenomena:
*The organization has hired rare and highly talented people across the world from some of the best pharmaceutical companies.
* The attrition rate for the top and valued talent segment in the organization has come down from 19 percent to 12.89 percent.
* Some of the key critical positions have been filled from within the organization.

THE TALENT ACQUISITION PROCESS
The organization partnered with some of the leading search companies across the globe. The organization realized the need to tap into the global market and get the best talent to know the organization, its future plans and the excitement that they would be able to get through a challenging role. The CEO personally ensured that he was recruiting for most of the key positions.
The organization adopted the following process to identify the right person for the given job:
Step 1. The detailed job specifications of the position were documented. The methodology used was as per Hay. The position specs ensured that the detailed competency requirements from the role are clearly articulated.
Step 2. Appropriate psychometric tools were identified and considering the global reach,

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were administered online or onsite. The tool used was Thomas profiling which was coupled with a leadership style indicator in case of specific positions. These tools map responses of an individual in terms of:

- strengths of an individual;
- weaknesses of an individual;

The leadership style indicator (Figure 6) maps the:

- working style;
- leadership style;
- thinking style;
- personal style;
- career beliefs;
- career motivation.

The reports from these tools are validated by reference check feedback and competency based interviews to see if a defined pattern emerges to base recruitment decision. The report was then being used to decide the further course of action for the possible recruitment.

Step 3. A comprehensive docket that outlines the leader's profile on criterion established earlier was generated. It underlined areas of strengths and opportunities. The docket included a confidential page outlining a metric ''Recommendation'' on employability to the organization.

The process is expected to be used for both external and internal recruitments. The proposed process steps are depicted in Figure 7

TALENT MANAGEMENT PROCESS

The talent management process was divided into the following steps:

1. Identification of talent – the people were assessed on the organization's competency framework. The methodology used was through the Assessment & Development Centers. This method was adopted for all middle managers.

2. Based on the assessment results, the participants were plotted on a talent matrix which is a Performance versus Potential 3 £ 3 matrix (middle managers only). The matrix was shared only with the CEO and the HODs. The employees are not aware of either the matrix or their talent type.

3. Documentation of the individual development plan (IDP) (see Appendix 2, Figure A2) by the individual. It captured the following:

* Aspirations – short and long term.
* Areas of strength.
* Areas of improvement.

The format has been annexed.

4. Individual then discussed the IDP with the reporting manager/functional head. There were various learning strategies that could be adopted for leadership development. A brief summary is as per Table II. Based on the individual's learning curve, criticality of role being performed, potential to do better, etc., one or more learning strategies was adopted.

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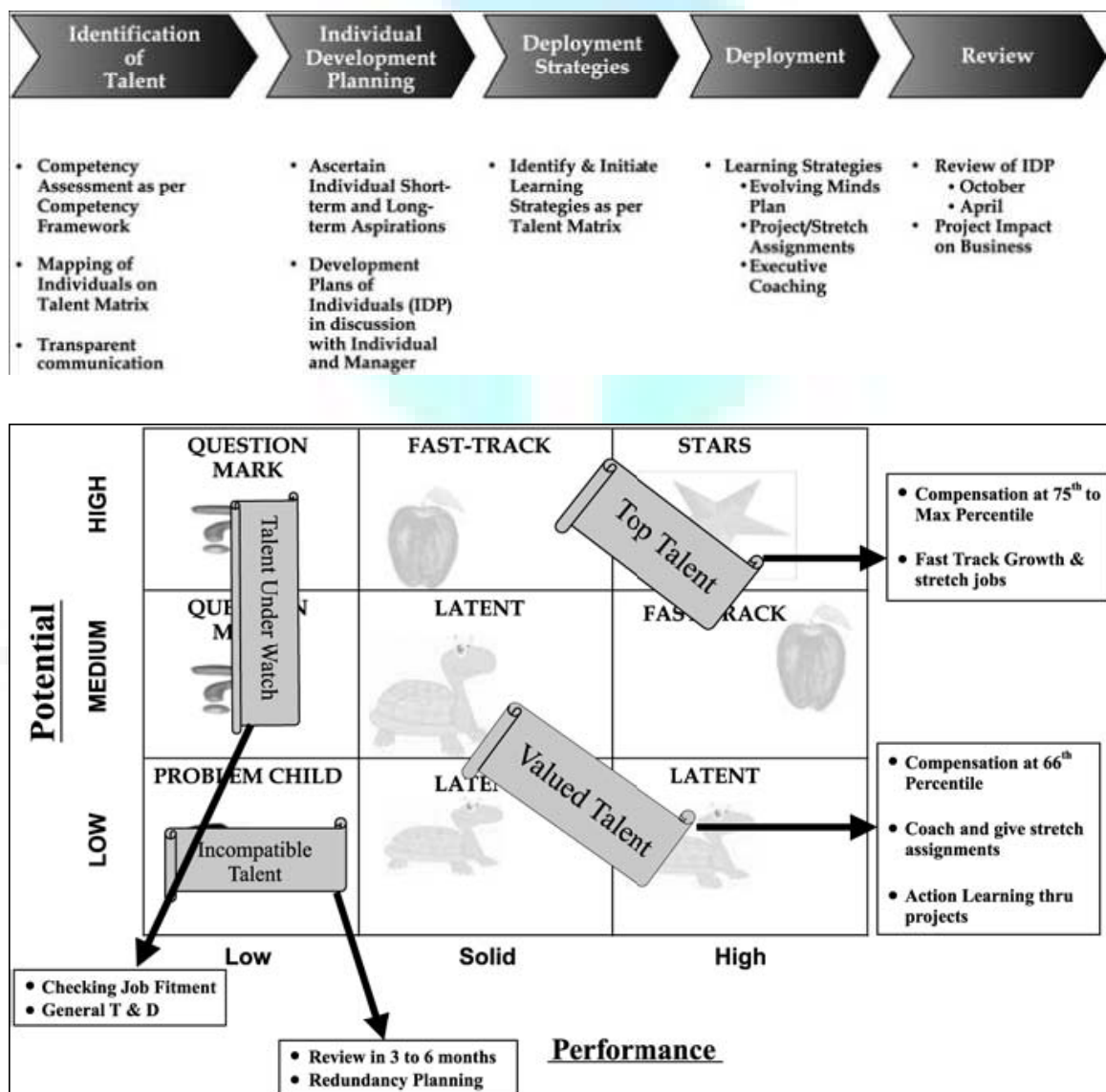
5. Signoff between the reporting manager/function head was taken to have complete commitment on the plan.

6. Individual then took charge of his/her learning and the manager enabled the same.

7. Reporting manager/function head conducted periodic reviews to ascertain the progress on each of the areas. These reviews were done one on one and the same was shared with human resources to facilitate the development.

The ground reality on the talent matrix

In total approximately 150 middle managers went through this process. The assesses talent was segmented into top talent;

- valued talent;
- talent under watch;
- Incompatible talent.

CONCLUSION

In summary, talent management is not a passing fad. It is a pressing and competitive priority for all organizations in this era of an aging workforce. An essential component of any talent management strategy is ensuring that valuable institutional and professional knowledge held by older workers is transferred, as appropriate, to the institutional knowledge base and to designated individuals. These challenges are clear and present, as lost knowledge is usually unrecoverable organizational and HR executives must demonstrate bold leadership in instituting policies, practices and cultural changes to facilitate the smooth and comprehensive transfer of knowledge within their organizations.

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RURAL AND URBAN WOMEN READERS' PERCEPTION TOWARDS TAMIL NADU REGIONAL NEWSPAPERS – A COMPARATIVE STUDY IN AND AROUND COIMBATORE CITY

S.V.RAMESH
RESEARCH SCHOLAR, MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI
HEAD
DEPARTMENT OF COMMERCE
DR. N. G. P. ARTS & SCIENCE COLLEGE
COIMBATORE

DR. D. VENKATARAMARAJU
ASSOCIATE PROFESSOR
POST GRADUATE AND RESEARCH DEPARTMENT OF COMMERCE
PACHAIYAPPA'S COLLEGE
CHENNAI

ABSTRACT

A newspaper is a scheduled publication containing the Current Events, Informative Articles, Medical or Health Related Information, Employment Opportunities, Business and International News, National News, State News, District News, Movie News, Sports News, Advertisements, etc. Both men and women readers have different news expectations in various proportions from the newspapers. Hence, an attempt has been made by the researcher through this comparative study to analyze the associations and divergences exclusively in Rural and Urban Women Readers' perception towards Tamil Nadu Regional Newspapers in and around Coimbatore City.

KEYWORDS

scheduled, events, employment, international, comparative, associations, divergences, rural, urban, regional, perception.

INTRODUCTION

There are different Women readers at dissimilar age categories with different educational qualifications are reading Tamil Nadu Regional Newspapers in and around Coimbatore City. The perceptions of them about the Tamil Nadu Regional Newspapers differ from a person to person based on their expectations of the news. In this study, the researcher is attempted to analyze particularly the associations and divergences in Rural and Urban Women Readers' perception towards Tamil Nadu Regional Newspapers in and around Coimbatore City.

SCOPE OF THE STUDY

The study is reflected on the facts considered by the Rural and Urban Women Readers of Tamil Nadu Regional Newspapers. The different age categories of the rural and urban women readers and educational qualifications of the rural and urban women readers have been compared with level of satisfaction to explore the relationship between them. The study is confined to in and around Coimbatore City.

OBJECTIVES OF THE STUDY

1. To know the socio-economic profile of the selective Rural and Urban Women readers of Tamil Nadu Regional Newspapers.
2. To analyze the relationship between the respondents' Age and Level of satisfaction as well as their educational Qualifications and Level of satisfaction
3. To study the reasons for purchasing the Tamil Nadu Regional Newspapers by the equally selected Rural and Urban Women Readers in and around Coimbatore City.

METHODOLOGY OF THE STUDY

The present study is based on the field survey conducted with the help of a well-structured questionnaire and interviews with the Rural and Urban Women readers of Tamil Nadu Regional News papers. The primary data was collected from 100 rural area women respondents and 100 urban area women respondents. The secondary data were collected from various journals and magazines.

LIMITATIONS OF THE STUDY

1) Only Women Readers have been considered for this study.
2) The sample size is limited to 100 in rural and 100 in urban area.
3) This study is restricted to in and around Coimbatore city only.
4) The surveyed Readers might have concealed the facts due to some personal problems.
5) The observation made may not be applicable to the areas other than the surveyed field.

STATISTICAL TOOLS USED

The following Statistical tools have been applied for the study.
1) Percentage Analysis
2) Chi–square Analysis and
3) Ranking Analysis

HYPOTHESES OF THE STUDY

In accordance with the objectives of the study, the following were the hypotheses set and tested using Chi–square test for the study.
1) There is no significant relationship between the age and level of satisfaction towards newspapers in rural and urban area.
2) There is no significant relationship between the Educational Qualification   and level of satisfaction towards newspapers in rural and urban area.

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TABLE-1: AGE OF THE RESPONDENTS

Age	Urban		Rural	
	No. of Respondents	%	No. of Respondents	%
Below 21 Years	20	10	19	9.5
21 to 30 Years	22	11	24	12
31 to 40 Years	34	17	29	14.5
Above 40 Years	24	12	28	14
Total	**100**	**50**	**100**	**50**

Source: Survey data

The above table-1 reveals that out of the total respondents, 10% from urban area and 9.5% from rural area are belonging to the age group of below 21 years, 11% from urban area and 12% from rural area are belonging to the age group of 21 to 30 years. 17% from urban area and 14.5% from rural area are belonging to the age group of 31 to 40 years and the remaining 12% from urban area and 14% from rural area are belonging to the age group of above 40 years.

TABLE-2: EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

Educational Qualification	Urban		Rural	
	No. of Respondents	%	No. of Respondents	%
School Level	40	20	37	18.5
College Level	37	18.5	37	18.5
Professional	23	11.5	26	13
Total	**100**	**50**	**100**	**50**

Source: Survey data

On analyzing the table-2, it is found that out of the total respondents, 20% from urban area and 18.5% from rural area have only school level education, 18.5% from both urban area and rural area have college level of education and 11.5% from urban area and 13% from rural area are professionals.

TABLE -3: BRAND OF NEWSPAPERS PURCHASED BY THE RESPONDENTS

Brand of Newspapers	Urban		Rural	
	No. of Respondents	%	No. of Respondents	%
Dinamalar	16	8	21	10.5
Daily Thanthi	24	12	12	6
Thinamani	35	17.5	27	13.5
Dinakaran	12	6	29	14.5
Others*	13	6.5	11	5.5
Total	**100**	**50**	**100**	**50**

Source: Survey data

The above table-3 clearly depicts that out of total respondents, 8% from urban area and 10.5% from rural area are purchasing Dinamalar newspaper. 12% from urban area and 6% from rural area are purchasing Daily Thanthi newspaper, 17.5% from urban area and 13.5% from rural area are purchasing Thinamani newspaper, 6% from urban area and 14.5% from rural area are purchasing Dinakaran and the Remaining 6.5% from urban area and 5.5% from the rural area are purchasing other newspapers like* Maalai Murasu, Maalai Malar etc.

CHI-SQUARE ANALYSIS
AGE AND LEVEL OF SATISFACTION IN NEWSPAPERS – URBAN

With a view to find the degree of association between Age of the respondents and the level of satisfaction in newspapers in urban area and rural area, two way tables were prepared.

TABLE-4: AGE AND LEVEL OF SATISFACTION IN NEWSPAPERS – URBAN

Age	Level of Satisfaction			Total
	Low	Medium	High	
Below 21 Years	4 (17.39)	5 (17.86)	11 (22.45)	**20**
21 to 30 Years	6 (26.09)	4 (14.29)	12 (24.49)	**22**
31 to 40 Years	8 (34.78)	12 (42.86)	14 (28.57)	**34**
Above 40 Years	5 (27.74)	7 (25.00)	12 (24.49)	**24**
Total	**23**	**28**	**49**	**100**

Source: Survey data

TABLE-5: AGE AND LEVEL OF SATISFACTION IN NEWSPAPERS – RURAL

Age	Level of Satisfaction			Total
	Low	Medium	High	
Below 21 Years	3 (11.54)	5 (14.29)	11 (28.21)	**19**
21 to 30 Years	6 (23.08)	8 (22.86)	10 (25.64)	**24**
31 to 40 Years	7 (26.92)	10 (28.57)	12 (30.77)	**29**
Above 40 Years	10 (38.46)	12 (34.29)	6 (15.38)	**28**
Total	**26**	**35**	**39**	**100**

Source: Survey data

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TABLE-6: AGE AND LEVEL OF SATISFACTION IN NEWSPAPERS (Chi – Square Test)

Area	Calculated χ^2 Value	Table Value	D.F.	Result
Rural	8.497	9.488	4	Not Significant
Urban	7.103	12.592	4	Not Significant

Source: Calculated data

It is disclosed from the above Table -6 that the calculated chi–square values are lesser than the table values in both rural and urban area and the results are not significant at 5% level. Hence the hypothesis "No association between age and level of satisfaction in Newspapers" is accepted in both areas. From this analysis, it is identified that there is no significant relationship between Age and Level of Satisfaction in both rural area and urban area.

EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION IN NEWSPAPERS – URBAN

With a view to find the degree of association between Educational Qualification of the respondents and the level of satisfaction in newspapers in urban area and rural area, two way tables were prepared.

TABLE-7: EDUCATION QUALIFICATION AND LEVEL OF SATISFACTION IN NEWSPAPERS – URBAN

Educational Qualification	Level of Satisfaction			Total
	Low	Medium	High	
School Level	8 (25.81)	17 (24.14)	15 (37.50)	40
College Level	5 (16.13)	18 (62.07)	14 (35.00)	37
Professional	3 (9.68)	12 (41.38)	8 (20.00)	23
Total	16	47	37	100

Source: Survey data

TABLE-8: EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION IN NEWSPAPERS – RURAL

Educational Qualification	Level of Satisfaction			Total
	Low	Medium	High	
School Level	6 (19.35)	14 (48.28)	17 (42.50)	37
College Level	7 (22.58)	12 (41.38)	18 (45.00)	37
Professional	4 (12.90)	10 (34.48)	16 (40.00)	26
Total	17	36	51	100

Source: Survey data

TABLE-9: EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION IN NEWSPAPERS (Chi – Square Test)

Area	Calculated χ^2 value	Table Value	D.F.	Result
Rural	1.1185	9.488	4	Not Significant
Urban	1.1304	9.488	4	Not Significant

Source: Calculated data

It is disclosed from the above table-9 that the calculated chi–square values are lesser than the table values in both rural and urban area and the results are not significant at 5% level. Hence the hypothesis "No association between education qualification and level of satisfaction in Newspapers" is accepted in both areas. From this analysis, it is identified that there is no significant relationship between Educational Qualification and Level of Satisfaction in both rural area and urban area.

TABLE-10: THE RESPONDENTS' REASONS FOR PURCHASING NEWSPAPERS

Factor	Weighted average Score	Rank
National/District / Movie / Sports News	957	1
Intensity of Business and International News	587	4
Information About Psychological Oriented Issues	612	3
Medical or Health Related Information	653	2
Employment Opportunities	265	5

Source: Survey data

From the above table-10, it is inferred that the Respondents have ranked **NATIONAL /DISTRICT / MOVIE / SPORTS NEWS** as First, **MEDICAL OR HEALTH RELATED INFORMATION** as **Second**, **INFORMATION ABOUT PSYCHOLOGICAL ORIENTED ISSUES** as **Third**, **INTENSITY OF BUSINESS AND INTERNATIONAL NEWS** as **Fourth** and **EMPLOYMENT OPPORTUNITIES** as **Fifth** among the reasons for purchasing the Tamil Nadu Regional Newspapers.

FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS

The following are the findings in the study.

1) The majority of the respondents(i.e.17%)from urban area and 14.5% of the respondents from rural area are belonging to the age group of 31 to 40 years
2) The majority of the respondents (i.e.18.5%) from both in urban area and rural area have college level of education.
3) The majority of the respondents (i.e.17.5%) are reading Thinamani in urban area and 14.5% of the respondents are reading Dinakaran in rural area.
4) There is no significant relationship between age and level of satisfaction in both rural and urban area.
5) There is no significant relationship between educational qualification and level of satisfaction in both rural and urban area.
6) The majority of the respondents have given First rank to **NATIONAL /DISTRICT / MOVIE / SPORTS NEWS** as a reason for purchasing the Tamil Nadu Regional Newspapers

SUGGESTIONS

The cost of newspapers could be reduced as the most of respondents are expecting the low price of newspapers in rural and urban area. The newspapers should be supplied to the readers on time in their respective areas without any lag. The newspapers should contain only prompt and latest news. The excessive importance to advertisements should be avoided in between important news. The rumors should not be included as news in news papers. Curtailed laudable information should not be taken place in newspapers. Discarded preference to worthless news should not be made in Newspapers.

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CONCLUSION

Newspapers hold a very important place in the life of man today. They play an important part both in the national and international arena. They give us news and views on various aspects like sports, politics, education, health, business, spirituality etc. The same could be referred at any time as and when the readers require for classifications, clarifications and enrichments in the field concerned. Having this in mind, the publishers should reduce the price of the newspapers, The late news, excessive importance to advertisements, rumors, discarded preference to worthless news and curtailed laudable information in newspapers should be avoided to improve their supply of newspapers to both in rural and urban area.

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THE LAW AND THE CRISIS MANAGEMENT IN A HOSPITAL SETUP VIZ A VIZ CONSEQUENCES ON HEALTH CARE DELIVERY- A CASE STUDY OF JEHOVAH'S WITNESSES

DR. PRAKASH.K.N
RESEARCH SCHOLAR
CBSMS
BANGALORE UNIVERSITY
BANGALORE

DR. CYNTHIA MENEZES
READER
CANARA BANK SCHOOL OF MANAGEMENT STUDIES
BANGALORE UNIVERSITY
BANGALORE

S. HARISH BABU
ASST.PROFESSOR
DEPARTMENT OF MANAGEMENT STUDIES
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
YELAHANKA

ABSTRACT

Jehovah's Witnesses are ethnical minority community who refuse transfusion of whole blood, red cells, white cells, platelets and plasma. They seek medical attention, accept most procedures and treatments. This tension between medical science and religious fervor resulted in moral dilemmas for medical professionals. Many Jehovah's Witnesses carry a signed and witnessed advance directive card refusing blood transfusions. This study is to know whether ethnical community beliefs can make impact on a medical treatment and what would be the role of law while treating such patients. Court decisions can go either in favor of Jehovah's Witnesses or of medical fraternity. Parental decisions can be over ruled by court and doctors were given liberty to judiciously transfuse the blood in order to save the minor. Transfusions among minor can invoke court cases and decisions years later after they attain majority. Passage of time didn't made major impact on Watchtower Society to change their feelings towards blood transfusions. Some hospitals did succeed in getting court order to transfuse blood to Jehovah's Witnesses. This custom invokes hospitals involved in medical tourism to know the various beliefs among different ethnic communities we are treating.

KEYWORDS

Jehovah's Witnesses, Blood Transfusions, Medical Tourism.

INTRODUCTION

The name Jehovah (or Yahweh, as the Roman Catholic Jerusalem Bible and some scholars prefer) appears in the original Hebrew Scriptures).In most ways Jehovah's Witnesses are like everyone else[1]. They have normal problems—economic, physical and emotional. They have made a dedication to God to do his will, and they apply themselves to fulfill this dedication. In all their activities they seek guidance from God's Word and his holy spirit. It is a descriptive name, indicating that they bear witness concerning Jehovah, his God ship, and his purposes. They are approximately 7.2 million populations with presence in most countries[2], though they do not form a large part of the population of any country. They believe in taking blood into the body through mouth or veins violate God's laws. In fact, they will go so far as to allow a loved one to die rather than accept a transfusion, as they believe transfusions are a gross violation of God's law[3].

They absolutely refuse transfusion of whole blood, red cells, white cells, platelets and plasma. They believe that blood removed from the body should be discarded and therefore will not accept stored autologous blood components. They are conscientious about seeking medical attention and accept most procedures and treatments. They will usually accept autologous blood maintained in continuous circulation, such as with haemodilution, cell savers, dialysis, apheresis or extracorporeal bypass. Their religious beliefs do not absolutely prohibit the use of products containing blood fractions (e.g. albumin, cryoprecipitate).The final decision rests with the individual. Their religious beliefs do not absolutely prohibit the use of products containing blood fractions (e.g. albumin, cryoprecipitate).The final decision rests with the individuals[4].

REVIEW OF LITERATURE

The first blood transfusion involving a human being is performed in June 15. 1667 and the patient — a 15-year-old boy who had been bled so much by his doctor that he required an infusion of sheep's blood, somehow, the kid recovered[6]. Later many years blood transfusions were ineffective due to complexity of blood transfusions. First well recorded transfusion happened in year 1818 when Mr. James Blundell transfused human blood to a post partum hemorrhage patient. Another discovery that advanced the science of blood transfusions occurred in 1901, when Karl Landsteiner demonstrated the presence of agglutinins and iso-agglutinins in the blood[7]. The first true blood bank was organized at Chicago's Cook County Hospital in 1936[8].

"The day's news tells of a mother who sacrificed six ounces of her blood in a transfusion for her baby girl. Strange that the busy press should even consider this news. A mother who wouldn't consent to a blood transfusion for her child would be much greater news and the world a sorry place indeed on the day that such news is found!" -- Columnist Allene Sumner, in 1926[9].

Watchtower Society, New York first stopped Jehovah's Witnesses from accepting blood transfusions in 1945, there has been a stream of state and federal court cases on moral concept that allow an adult or a child to needlessly die inside a hospital setting. However, such has been accomplished with tireless efforts of the Watchtower Society's Legal Department[10].

The law in the United States regarding Jehovah's Witnesses and their refusal to accept blood transfusions is somewhat settled, although subject to exceptions. Most competent adults have the constitutional right to refuse to accept a blood transfusion, even if such refusal means they will die. Every year in the United States, an unknown number of adult Jehovah's Witnesses exercise their constitutional right to choose death over a life-saving blood transfusion. Adult Jehovah's Witness Parents and Guardians also will attempt to impose the same "death decision" on their minor children, but practically every hospital will attempt to obtain a court order which will permit them to administer medically necessary blood transfusions over the parent's objections . Courts in the United States will nearly always appoint a temporary legal guardian under such circumstances to oversee and guarantee necessary medical care. Scenarios involving Jehovah's

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Witnesses Minors nearing the age of majority, pregnant JW Mothers and their "fetuses "and adult JWs who have existing parental obligations, are less settled[11]. Jehovah's Witnesses scattered around the United States are adamant supporters of the home deliveries. Thousands, of Jehovah's Witness newborn babies, who needed a blood transfusion to survive, died because their birth occurred outside a hospital setting. Many Jehovah's Witness families with known genetic problems, repeatedly had babies as those parents simply believed one to eventually survive[12]. Dr. Carl J. Saphier led a study at Mount Sinai School of Medicine in New York, NY, of the maternal death rate among Jehovah's Witnesses. The report indicates a death rate of 521 deaths per 100,000 live births--a rate nearly 44 times higher than that among the general US population. The precision of that number is in doubt because it was based on only two deaths. Sr. Saphier said "The findings imply that special care is required for women who are Jehovah's Witnesses, including special counseling prior to delivery, methods of minimizing the blood loss at delivery, and fast treatment for any hemorrhage[13].

Opening the way to reject blood transfusions may open the way to be refusing other life-saving medical procedures. Right-to-die and assisted suicide shares common arguments with the Jehovah's Witnesses. The Watch Tower Society has Hospital Information Services to provide education and innovate into bloodless surgeries and treatment. This service maintains Hospital Liaison Committees, functions to support adherents[14].

The Supreme Court of Canada has made a number of decisions concerning Jehovah's Witnesses. These include laws that affected activities of Jehovah's Witnesses in the 1950s and more recent cases dealing with Witness parent's rights to decide medical treatment was in the interest of their children based on their faith. Justice Rosalie Abella wrote for the majority, "A young person is entitled to a degree of decisional autonomy commensurate with his or her maturity[15].

In 1998, El Salvador's, Central America ,Supreme Court of Justice struck down a Social Security Hospital rule that required patients to donate blood in order to receive medical treatment. Previously, hospital policy called for all patients to provide two units of blood prior to a surgical procedure. After this, those who wish to receive medical treatment in the Social Security Hospital have the legal right to choose not to give blood[16].

Virginia, *U.S. state*, Section 79(1), (b) of the Criminal Offences Act of 1960 (Act 29) states that "A parent is under duty to give access to the necessities of health and life to the child who is not of age and capacity as to be able to obtain those basic necessities" [17].

In England, adult patients of sound mind have a basic human right and protected by common law to refuse medical treatment even in the face of death[18]. If patient is unable to make their views known, then the effect of a close relative objecting to treatment is only effective as evidence of what would have been likely to be the patient's own wish . Patient's kin objecting to a blood transfusion would only have legal weight 'if the patient had previously expressed their own refusal of transfusions by, for example, carrying a card [19].

In December 2000, Germany's Supreme Court ruled that Jehovah's Witnesses did not have to pass a test of "loyalty to the state", laying the foundation for greater freedoms for German citizens. According to a Berlin court, Jehovah's Witnesses should have the same legal status as Germany's major [20].

The Constitution of the Russian Federation, Article 14, states, the Russian Federation shall be a secular state. No religion may be instituted as state-sponsored or mandatory religion and Religious associations shall be separated from the state, and shall be equal before the law. Hence Jehovah's Witnesses have to no right to refuse transfusions and can be punished guilty if knowingly caused harm to that effect[21].

On February 9, 1998, the Tokyo High Court handed down a landmark decision upholding Takeda's right to informed consent. An upcoming decision by the Supreme Court of Japan could lead to greater respect for a patient's right to self-determination, moving Japan closer to international standards of patients' rights[22].

Numerous individual cases involving Jehovah's Witnesses have been heard by various courts throughout the world and some are cited and studied.

STATEMENT OF THE PROBLEM

Jehovah's Witnesses and doctors are vulnerable in indecision over the right to settle on the medical treatment. Doctors, not wishing to be deprived of an important treatment option, sometimes refused to treat or operate on Jehovah's Witnesses as transfusions are crucial in emergencies and tertiary care. In cases of life-threatening illness or injuries, judges often issued emergency court orders, allowing doctors to override patient objections and transfuse if necessary. Witnesses too went to court for patient autonomy and the patient's right of informed consent. This tension between medical science and religious passion formed ethical dilemmas for medical professionals and Jehovah's Witnesses[5].

IMPORTANCE OF THE STUDY

Aim: Many Jehovah's Witnesses carry a signed and witnessed advance directive card absolutely refusing blood. This study is to know whether ethnical community beliefs make impact on a medical treatment of such patients and what would be the role of law while treating such patients. Over the period of time does the change in law help the medical fraternity to prevent untimely deaths or still hospitals face dilemma of taking decision to transfuse blood.

RESULTS & DISCUSSION:

Case 1.Misae Takeda, 1992, Japan, one of Jehovah's Witnesses, was given a blood transfusion in **1992**, while still under sedation following surgery to remove a malignant tumor of the liver. On February 29, 2000, the four judges of the Supreme Court unanimously decided that doctors were at fault because they failed to explain that they might give her a blood transfusion if deemed necessary during the operation, thus depriving her of the right to decide whether to accept the blood transfusion or not. This is the first case in Japan where a civil charge has been made against physicians for giving an unwanted blood transfusion[23].

Case 2. Prematurely born infant , September 2005, South Africa, the Jehovah's Witnesses parents of a prematurely born infant didn't want him to receive a needed blood transfusion. Judge Willie Seriti heard oral evidence late that evening from pediatricians and a neurologist who said the baby suffered from severe anemia, coupled with secondary heart failure, and that his life depended on a transfusion. The doctors asked the court to override the family's wishes that the child should not be given a transfusion. Doctors were able to get a court order authorizing them to save the infant's life despite the parents' wishes - their religious beliefs can't trump the basic rights of their own child[24].

Case 3. Ms. K, Sept.2006, Ireland, an African woman aged 23, gave birth at the Coombe women's hospital in Dublin, Ireland on **21.Sept.2006.** The baby is doing fine, but the mother started to hemorrhage. She allegedly lost 80% of her blood. She is a Jehovah's Witness and refused a blood translation. The hospital applied to a the High Court of Ireland on an emergency basis. The court ordered that a transfusion be given. Mr Justice Henry Abbott ruled that doctors must intervene in the interests of the child. The judge said he accepted Ms K was compos mentis [of sound mind] and if brought to court on a stretcher she would oppose the application. But he told the court he felt it necessary to override her religious beliefs on the grounds that her baby boy had no other relatives, or guardians, that were known of in the state. Mr Justice Abbott said the interests of the child were paramount and that he must err on the side of preserving life. Arguments over whether the transfusion should be given could be heard at a later date, he added[25].

Case 4. A.C. On June 26, 2009, Canada , the case involved a young Jehovah's Witness[26], identified only as A.C., who was admitted to a hospital in Winnipeg with internal bleeding as a complication of crahn's disease. Doctors ordered a blood transfusion, but A.C. and her parents refused on religious grounds; child-welfare officials moved to take her into care and a court ordered that she get the transfusion. At the time, the judge said he was satisfied she was competent, but since she was under 16 the judge felt that her competence was immaterial to existing law[27].

Case 5. S/O Natalya Podlozhevich , February 2010, Russia,A Russian court has fined a woman for rejecting doctors' advice to allow her five-year-old son to have a blood transfusion. Her decision resulted in the boy's death in hospital. The verdict is the first such precedent in the Russia. In some cases a court may override parental rejection, but that is not possible in emergencies. Such was the case of Natalya Podlozhevich and her son in Russia's Khanty-Mansi region in the Urals. In February 2010, the boy was taken to hospital in critical condition and required a blood transfusion. Natalya did not give her permission even after doctors explained that her refusal would put the child's life in danger. Without proper treatment, the boy died two days later. The prosecutor's office opened a case against the mother for leaving a dependent person in danger. On Wednesday, a city court found her guilty and she was ordered to pay a fine. It is the first sentence in such a case and it will set precedent for future trials, a spokesperson for the prosecution said[28].

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Case 6. Joshua McAuley, May 2010, England, 15 yrs ,a teenage Jehovah's Witness who was crushed by a car refused a blood transfusion before he died reported by Laura Roberts in 7:30AM BST **on 18 May 2010**. Teenage Jehovah's Witness refuses blood transfusion and dies. Joshua McAuley, 15, is understood to have declined the treatment advised by doctors and was not overruled by members of his family. McAuley was treated at Selly Oak hospital in Birmingham after he was pinned against a wall by a car in a freak accident. He suffered multiple injuries in the crash, was airlifted to hospital after being trapped under the rubble of a food shop. He suffered serious abdominal and leg injuries, and died at around 5.30pm that evening. A spokesman from Selly Oak hospital said: "There's not one single policy and not one single law regarding transfusions. There's no automatic right to override parental wishes or that of a minor[29].

Case 7. Candy Huff, May.2011, USA ,Bruce Huff from Charlestown, southern Indiana, USA, refused blood transfusions to his wife, 8.May.2011. Candy Huff has been diagnosed with poly-pharmaceutical overdose and said to do absolutely anything to save her life except give her blood or blood products, Bruce Huff told the Evening News and Tribune. Huff, who has Parkinson's disease, said he and his wife always took care of each other. The hospital petitioned a court to appoint someone else to make medical decisions for Candy Huff, saying Bruce Huff was unable to act in her best interest. The court appointed Candy Huff's aunt, and the blood transfusions continued. Bruce Huff said his religious beliefs provoked the hospital's action, but hospital attorney Pamela Thompson denied that. "This situation was very, very unique," Thompson said. "(Religion) was not the substance or basis of the petition." She said she could not elaborate due to privacy laws. Indiana law establishes a hierarchy of who can make medical decisions. First is a judicially appointed medical representative. If there is not one, spouses, parents, adult children or adult siblings all have equal say. If they disagree, the court will decide who has the individual's best interests in mind, Thompson said. A religious superior also can make such decisions."The hospital always tries to look at the facts and circumstances and look at the families, all of the patient's rights and all of the family's rights [30]."

Case 8. nine-year old girl (name withheld), June.2011,James Town ,Virginia The life of a critically ill nine-year old girl (name withheld) whose parents belong to the Jehovah Witnesses faith was saved when the James Town police offered protection to the medical staff of the Princess Marie Louise Children's Hospital to provide blood to the dying patient. The police intervention was as a result of a distress call by doctors and nurses at the hospital who were faced with the challenge at the hands of the girl's parents who were protesting against the intended transfusion of blood to their daughter since it was against their faith. The girl, a sickle cell patient, whose blood count had gone down drastically, was diagnosed by a team of doctors and the mother brought the patient who had the "SS" blood trait to the hospital looking very pale. Nurses recognized the girl as a sickle cell patient who had not been attending clinic for counseling and guidance. The mother refused to send the sample meant for the blood grouping or cross-matching that could aid the possible blood transfusion. She was adamant and urged on by some friends, she demanded that the daughter be discharged forthwith. Police Superintendent immediately responded to the call and dispatched a team of policemen to provide protection to the health team. The doctors finally resolved to have the girl transfused with the blood. Superintendent Bakomora justified the actions of the medical staff, saying they owed it a duty to prevent the loss of life[31].

CONCLUSION

Jehovah's Witnesses preach and practice those passages of the Bible which forbid blood transfusions. It's a very complex medico legal topic that has to be analyzed on a case by case basis. Morality of Jehovah's Witnesses and medical professionals are in sharp contrast regarding blood transfusions. There is continuum of variation of laws among various nations. This ethnical belief and individual freedom resulted in increased mortalities among Jehovah's Witnesses community. Some hospitals did succeed in getting court order to transfuse blood to Jehovah's Witnesses in order to save lives. This strange behavior invokes hospitals involved in medical tourism and tertiary care to know the various beliefs among different ethnic communities we are treating.

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A COMPARATIVE STUDY OF CORPORATE GOVERNANCE DISCLOSURE PRACTICE OF SELECTED BANKING UNITS

PAYAL J. THAKAR
ASST. PROFESSOR
TAKSHASHILA COLLEGE OF MANAGEMENT & TECHNOLOGY
SARDAR PATEL UNIVERSITY
VALLABH VIDYANAGAR

JAIMIN H TRIVEDI
ASST. PROFESSOR
TAKSHASHILA COLLEGE OF MANAGEMENT & TECHNOLOGY
SARDAR PATEL UNIVERSITY
VALLABH VIDYANAGAR

RIDDHI A TRIVEDI
ASST. PROFESSOR
TAKSHASHILA COLLEGE OF MANAGEMENT & TECHNOLOGY
SARDAR PATEL UNIVERSITY
VALLABH VIDYANAGAR

ABSTRACT
This study attempts to analyze the corporate governance disclosure practice followed by selected banking sector units. This study also attempts to analyze the financial strength of the banking units, which helps to understand the economic conditions and efficiency of the selected banking sector units. This study will give insight in the financial position of the selected units as well as to understand the process of compliance with the legal requirement, which is require to understand the investors point of view is concern so as to take the decision pertaining to investment.

KEYWORDS
Corporate governance, ICICI, HDFC.

INTRODUCTION

Corporate Governance is a combination of two words. Corporate + Governance. Corporate means any legal business entity that exists independently by the person or people who have been granted the charter creating it, and is vested with many of the rights given to the individual. And Governance is a set of minimum framework or rules necessary to tackle problems. Thus applying the concept, corporate governance is formal or informal rules that must be followed by any legal business entity.

According to the World Bank "good governance is epitomized by predictable, open and enlightened policy making, bureaucracy imbued with professional ethos acting in furtherance of the public good, the rule of law, transparent processes and a strong civil society participating in public affairs." On the other hand, Organization for the Economic Cooperation and Development defines governance as the use of political authority and exercise of control in a society in relation to the management of its resources of social and economic development. This broad definition encompasses the role of public authorities in establishing the environment in which economic operators function and helps in determining the distribution of benefits as well as the nature of the relation between the ruler and the ruled. Good governance encompasses all actions aimed at providing its citizens, a good quality of life.

Modern day business has always suffered from dilemma of the sole goal of profit maximization or other goals like personal interests of managers. Values & ethics are losing its existence in run for profit. So, good corporate governance practices are necessary to focus the board's attention towards rules, regulations, laws, policies, ethics, social responsibility etc.

Good Corporate Governance encompasses all actions aimed at providing its citizens good quality of life. It relates with a code of conduct which the management of a company observes while exercising its power.

In this context, the Indian Banking sector has a special role to play, not because of the critical nature of the business, but because it is a sector that has large public ownership. Some of the factors specified to banks and financial institutions which make Corporate Governance more of an imperative are as follows:

1. Interest of the depositors is of paramount importance as far as the banks are concerned, unlike the case of corporate. Banks have fiduciary relationship with their customer i.e. they hold the wealth of the depositors and manage it on their behalf. This creates additional principal-agent relationship with banks that generally do not exist with the non-financial firms.
2. The risks in banking institutions are many. For example, credit risk, market risk, counter party risk, liquidity risk etc.
3. As it is a relatively more regulated sector some laxity is witnessed on the Corporate Governance front at the Board level as also the senior management level.
4. It is the fact that banks are highly leveraged entities and also that their failure would have a contagion effect on the entire financial system.

In this study the focus is to make comparison between two banking units. So as to analyze the extent of Corporate Governance Disclosure Practices of both the banks. Various tools and techniques are used for assessing Corporate Governance Disclosure Practices in both the banks.

ICICI

In 1955 The Industrial Credit and Investment Corporation of India Limited (ICICI) was incorporated at the initiative of World Bank, the Government of India and representatives of Indian industry, with the objective of creating a development financial institution for providing medium-term and long-term project financing to Indian businesses. In 1994 ICICI established Banking Corporation as a banking subsidiary. Formerly, Industrial Credit and Investment Corporation of India. Later, ICICI Banking Corporation was renamed as 'ICICI Bank Limited'. ICICI founded a separate legal entity, ICICI Bank, to undertake normal banking operations - taking deposits, credit cards, car loans etc.

ICICI Bank is India's largest private sector bank and second largest overall in terms of assets. A new generation bank, ICICI Bank started with all the latest technologies to hit the Indian banking industry in the second half of the nineties. All its branches are fully computerized with the state-of-the-art technology and

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systems, networked through VSAT technology. The bank is connected to the SWIFT international network. The bank is also keen to offer its services to the Indian agricultural sector.

Over 2,000 Internet kiosks and 70 agric-desks have been established in locations with large agricultural markets. The Bank also has a network of 1,700 + branches (as on 31 March, 2010) and about 4,721 ATMs in India and presence in 18 countries, as well as some 24 million + customers.

ICICI Bank offers a wide range of banking products and financial services to corporate and retail customers through a variety of delivery channels and specialized subsidiaries and affiliates in the areas of investment banking, life and non-life insurance, venture capital and asset management. ICICI Bank is also the largest issuer of credit cards in India. ICICI Bank has got its equity shares listed on the stock exchanges at Kolkata and Vadodara, Mumbai and the National Stock Exchange of India Limited, and its ADRs on the New York Stock Exchange (NYSE). The Bank is expanding in overseas markets and has the largest international balance sheet among Indian banks. ICICI Bank now has wholly-owned subsidiaries, branches and representatives offices in 18 countries, including an offshore unit in Mumbai. This includes wholly owned subsidiaries in Canada, Russia and the UK (the subsidiary through which the HiSAVE savings brand is operated), offshore banking units in Bahrain and Singapore, an advisory branch in Dubai, branches in Belgium, Hong Kong and Sri Lanka, and representative offices in Bangladesh, China, Malaysia, Indonesia, South Africa, Thailand, the United Arab Emirates and USA. Overseas, the Bank is targeting the NRI (Non-Resident Indian) population in particular.

HDFC

It is the first Private Bank in India to receive a principle approval from the Reserve Bank of India to set up a bank in the private sector banks in India as part of the RBI's liberalization policy of the Indian Banking Industry. It was promoted by House Development Finance Corporation (HDFC) & incorporated in August 1994 as HDFC Bank Limited. The Bank has a network of 1725 branches in 771 cities across India. All branches are linked on an online real-time basis. Customers in over 500 locations are also serviced through Telephone Banking. The Bank also has a network of 3898 ATMs across India. HDFC Bank operates in a highly automated environment in terms of information technology and communication systems. All the bank's branches have online connectivity.

In a milestone transaction in the Indian banking industry, Times Bank Limited (promoted by Bennett, Coleman & Co. / Times Group) was merged with HDFC Bank Ltd., in 2000. This was the first merger of two private banks in India. As per the scheme of amalgamation approved by the shareholders of both banks and the Reserve Bank of India, shareholders of Times Bank received 1 share of HDFC Bank for every 5.75 shares of Times Bank.

In 2008 HDFC Bank acquired Centurion Bank of Punjab taking its total branches to more than 1,000. The amalgamated bank emerged with a strong deposit base of around Rs. 1,22,000 crore and net advances of around Rs. 89,000 crore. The balance sheet size of the combined entity is over Rs. 1,63,000 crore. The amalgamation added significant value to HDFC Bank in terms of increased branch network, geographic reach, and customer base, and a bigger pool of skilled manpower. The equity shares are listed at BSE, NSE, & NYSE.

RESEARCH METHODOLOGY

The prime object of this research paper is to understand the corporate governance disclosure practice followed by two banking sector unit, i.e. ICICI & HDFC as well as to compare the financial conditions of both the units. The present study is based on the secondary data only. The easy access of data is one of the reasons for selecting these companies. The statistical analysis have been undertaken by mean and't'-test. The study period is five years form 2004-05 to 2008-09. The objective of the study is to examine the corporate governance disclosure practices in selected Units and to study the financial performance of the selected units. The type of this research work is comparative analysis.

HYPOTHESIS OF THE STUDY

Following are the hypothesis of the study:

NULL HYPOTHESIS

Ho_1 = There is no significance difference in Corporate Governance between ICICI Bank and HDFC Bank during the period of study.
Ho_2 = There is no significance difference between ratios relating to profitability of ICICI Bank & HDFC Bank.

ALTERNATIVE HYPOTHESIS

Ha_1 = There is significance difference in Corporate Governance between ICICI Bank and HDFC Bank during the period of study.
Ha_2 = There is significance difference between ratios relating to profitability of ICICI Bank & HDFC Bank.

Brief descriptions of statistical tools used for the present study are:

- Mean:

It is also known as arithmetic average. It is the most common and simplest measure of central tendency and it is a widely used measure.

- 't' test:

The 't' test may be used to test a hypothesis stating that mean scores on some variable will be significantly different for two independent sample or groups. It is used when number of observations is small and the population standard deviation is unknown. The 't' is calculated from the sample data and then compared with probable value on 't' distribution at specific level of significance for concerning degree of freedom for accepting or rejecting the null hypothesis. Here the independent level of different factors rating at 95% confidence level null hypothesis.

STATISTICAL ANALYSIS & INTERPRETATION

't' TEST FOR HYPOTHESIS TESTING

The 't' test may be used to test a hypothesis stating that the mean scores on some variable will be significantly different for two independent samples or groups. It is used when number of observations is small and population standard deviation is unknown. The independent samples 't' test has also been conducted to check the significance level of the different ratio at 95% confidence level.

DESCRIPTIVE STATISTICS

Ratios	N	ICICI Bank				HDFC Bank			
		Mean	Std. Deviation	Minimum	Maximum	Mean	Std. Deviation	Minimum	Maximum
Net_Profit_to_total_Income	5	12.06	2.51027	9.71	15.63	14.31	2.45659	11.44	17.78
Net_interst_to_toatl_Income	5	76.87	2.47268	73.15	79.56	81.77	1.28929	79.92	83.32
Int_exp_to_ toal_income	5	55.54	3.85389	51.00	59.30	38.71	4.33307	34.48	45.42
ROCE	5	13.16	3.05714	10.09	17.23	18.44	4.15063	13.83	23.65
Propriotary	5	0.41	.05310	0.36	0.49	0.38	.14690	.23	.60
EPS	5	32.75	4.94213	27.22	39.39	37.25	12.41351	22.94	52.85
DPS	5	9.8	1.30384	8.00	11.00	7.1	2.21923	4.50	10.00

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ONE-SAMPLE TEST

Ratio	Test Value = 0				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Net_Profit_to_total_ income	15.887	9	.000	13.19100	11.3127	15.0693
Net_interst_to_toatl_ Income_Ratio	78.869	9	.000	79.32000	77.0449	81.5951
Int_exp_to_toal_income	15.399	9	.000	47.12900	40.2058	54.0522
ROCE	11.304	9	.000	15.80200	12.6396	18.9644
Propriotary_ Ratio	11.751	9	.000	.39200	.3165	.4675
EPS	12.008	9	.000	34.99900	28.4056	41.5924
DPS	11.987	9	.000	8.45000	6.8553	10.0447

TESTING OF HYPOTHESIS

The independence samples t tests was conducted to check the significance level of the different ratios at 95% Confidence Interval.

The significance level at 95% confidence level is less than 0.05 for all the ratios indicated so there is significance difference between ratios relating to profitability of ICICI and HDFC.

So, we reject the null hypothesis and accept the alternative hypothesis.

CONCLUSION

This study is important for the two major aspects firstly it can give understanding of practical approach & second it gives comparative overview of corporate governance provision in Indian corporate sector it is dynamic study in nature so the importance of the study is very high. Further same observations may be useful to academicians, industry people, depositors, general public, investors, policy makers and all stakeholders.

According to 't' – test the significance level at 95% confidence level is less than 0.05 for all the ratios indicated so there is significance difference between ratios relating to profitability of ICICI Bank & HDFC Bank .

An examination of above stated paragraphs it reveals that HDFC Bank discloses more items of corporate governance with compare to ICICI Bank & the financial performance is also better than ICICI Bank during the period of study.

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BUSINESS ENVIRONMENT IN INDIA AND CHINA: KEY INDICATORS AND GROWTH OF ECONOMY

AMITA MAXWELL
ASST. PROFESSOR
JOSEPH SCHOOL OF BUSINESS STUDIES
SHIATS -DEEMED UNIVERSITY
ALLAHABAD

ABSTRACT

The present paper is an attempt to explore the key indicators of business environment or economic development in China and India and the impact of these environmental variables on the growth of both economies over the years. As India and china share many things in common and both are now emerging as world's second and third largest economies respectively, historical perspective of both countries is traced and based on reports, secondary data from various findings a comparison has been made between both the countries on five key factors namely; government regulations/political-legal environment, economic reforms, labour market, attitude towards foreign direct investment and marketing base in order to compare the situation in both economies over the years and how favourable the environment is in terms of business and investments for both economies.. The study aims at finding out the challenges and opportunities for India in today's era of liberalization, privatization and globalization and how does India stand in comparison to china.

KEYWORDS

business environment, economies, India, China.

INTRODUCTION

The present paper is an attempt to explore the key indicators of business environment or economic development in India and China and the impact of these environmental variables on the growth of both economies over the years. There are obvious reasons for making such an analysis or comparison because of the following reasons:

- China and India are among the largest economies in the world today
- They have also been among the fastest growing over the last two decades and a half. They both entered the 1980s at comparable levels of per capita income following three decades of growth-China at an average rate of 4.4 percent per annum, and India at a rate of 3.75 percent[1].
- Since then China's economy has taken off to a state of unprecedented growth that averaged 10.1 percent per annum in the 1980s, 10.3 per cent per annum in the 1990s, and has yet to show any sign of slowing down[2].
- India's GDP growth has also picked up to an averaged 5.6 per cent a year in the 1980s, 6 percent per annum in the 1990s', and even higher since. Although India's growth rate has been remarkably high by any standard, the sustained growth gap between the two countries has intrigued observers, especially given what seemed to be significant similarities in their initial conditions.

Why is per capita income so much higher today in China than in India? And why is China's GDP growing so much faster? These questions are often open up to deliberations and debate among academicians, scholars, industrialists and people in the government.

HISTORICAL PERSPECTIVE- INDIA

After Independence in 1947, India adhered to socialist policies. In the 1980s, Prime Minister P. V. Narasimha Rao initiated some reforms. In 1991, after India faced a balance of payments crisis, it had to pledge 20 tons of gold to Union Bank of Switzerland and 47 tons to Bank of England as part of a bailout deal with the International Monetary Fund (IMF). In addition, IMF required India to undertake a series of structural economic reforms [1]. As a result of this requirement, the government of P. V. Narasimha Rao and his finance minister Manmohan Singh (the present Prime Minister of India) started breakthrough reforms, although they did not implement many of the reforms IMF wanted. The new neo-liberal policies included opening for international trade and investment, deregulation, initiation of privatization, tax reforms, and inflation-controlling measures. The overall direction of liberalisation has since remained the same, irrespective of the ruling party, although no party has yet tried to take on powerful lobbies such as the trade unions and farmers, or contentious issues such as reforming labour laws and reducing agricultural subsidies.[3] The main objective of the government was to transform the economic system from socialism to capitalism so as to achieve high economic growth and industrialize the nation for the well-being of Indian citizens. Today India is mainly characterized as a market economy.

India is the world's most populous democracy. According to the International Monetary Fund, as of 2011, the Indian economy is nominally worth US$1.843 trillion; it is the tenth-largest economy by market exchange rates, and is, at US$4.469 trillion, the third-largest by purchasing power parity, or PPP. India is one of the world's fastest-growing economies. Until 1991, all Indian governments followed protectionist policies that were influenced by socialist economics. Widespread state intervention and regulation largely walled the economy off from the outside world. An acute balance of payments crisis in 1991 forced the nation to liberalise its economy; since then it has slowly moved towards a free-market system by emphasizing both foreign trade and direct investment inflows. India's recent economic model is largely capitalist.

Major industries include textiles, telecommunications, chemicals, food processing, steel, transport equipment, cement, mining, petroleum, machinery, and software. India was the world's fifteenth-largest importer in 2009 and the eighteenth-largest exporter. Major exports include petroleum products, textile goods, jewelry, software, engineering goods, chemicals, and leather manufactures. Major imports include crude oil, machinery, gems, fertiliser, and chemicals. Between 2001 and 2011, the contribution of petrochemical and engineering goods to total exports grew from 14% to 42%. Despite impressive economic growth during recent decades, India continues to face socio-economic challenges. The World Bank cautions that, for India to achieve its economic potential, it must continue to focus on public sector reform, transport infrastructure, agricultural and rural development, removal of labour regulations, education, energy security, and public health and nutrition.

HISTORICAL PERSPECTIVE- CHINA

The People's Republic of China (PRC) is the world's second largest economy after the United States. It is the world's fastest-growing major economy, with growth rates averaging 10% over the past 30 years. China is also the largest exporter and second largest importer of goods in the world. The country's per capita GDP (nominal) was 5,184 (International Monetary Fund, 90th in the world) in 2011. As China's economic importance has grown, so has attention to the structure and health of that economy.

Since the late 1970s China has moved from a closed, centrally planned system to a more market-oriented one that plays a major global role - in 2010 China became the world's largest exporter. Reforms began with the phasing out of collectivized agriculture, and expanded to include the gradual liberalization of prices, fiscal decentralization, increased autonomy for state enterprises, creation of a diversified banking system, development of stock markets, rapid growth of

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[1] *http://en.wikipedia.org/wiki/India.*

[2] *http://en.wikipedia.org/wiki/India.*

[3] *http://en.wikipedia.org/wiki/India* economic_liberalization_in_india.

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the private sector, and opening to foreign trade and investment. China has implemented reforms in a gradualist fashion. In recent years, China has renewed its support for state-owned enterprises in sectors it considers important to "economic security," explicitly looking to foster globally competitive national champions.

A comparative analysis to gauge the business environment of India and China is based on the following **key indicators**:

GOVERNMENT REGULATIONS/ POLITICAL-LEGAL ENVIRONMENT

Governmental regulation and control, procedural complexities, political stability, legal environment are detrimental in deciding whether the host country offers conducive business environment or not, which becomes a crucial deciding factor and drawing strategy to invest or not by a company. A discussion is made on how conducive or feasible environment both countries provide and how it impacts foreign investment in the country. Below are some statistics based on World Bank Report, in terms of ease of doing business (based on 10 parameters).

4.1 Economies are ranked on their **ease of doing business**, from 1 – 183. A high ranking on the ease of doing business index means the regulatory environment is more conducive to the starting and operation of a local firm. This index averages the country's percentile rankings on 10 topics, made up of a variety of indicators, giving equal weight to each topic. The rankings for all economies are benchmarked to June 2011.

The table below is shown to indicate top five economies in terms of ease of business and data for India and china is shown to make comparison, ranking of all countries is not shown as it will be too detailed and not useful under this head.

TABLE 4.1

Economy	Ease of Doing Business Rank ▲	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Singapore	1	4	3	5	14	8	2	4	1	12	2
Hong Kong SAR, China	2	5	1	4	57	4	3	3	2	5	16
New Zealand	3	1	2	31	3	4	1	36	27	10	18
United States	4	13	17	17	16	4	5	72	20	7	15
Denmark	5	31	10	13	11	24	29	14	7	32	9
China	91	151	179	115	40	67	97	122	60	16	75
India	132	166	181	98	97	40	46	147	109	182	128

Source*: World Bank Report, http://www.doingbusiness.org/data/exploreeconomies.*
http://www.doingbusiness.org/data/exploreeconomies/india/

China's regulatory environment is more conducive than India's in terms of attracting foreign investment and starting new ventures in the country. India still needs to give up bureaucratic complexities and burdensome procedures to make it a conducive destination for new ventures.

4.2 The Heritage Foundation in partnership with the Wall Street Journal, US has published **index of economic freedom** data for the year 2010-12 for 184 countries, which throws light on country's overall score and its ranking on 10 definite parameters.

TABLE 3.2: INDEX OF ECONOMIC FREEDOM DATA 2012

COUNTRY	INDEX YEAR	OVERALL SCORE
INDIA	2012	51.2
CHINA	2012	54.6

Source: http://www.heritage.org/index/ranking

TABLE 4.2 A

COUNTRY	BUSINESS FREEDOM	TRADE FREEDOM	FISCAL FREEDOM	GOVT. SPENDING	MONETARY FREEDOM	INVESTMENT FREEDOM
INDIA	46.4	71.6	76.1	74.8	62.9	35.0
CHINA	35.5	64.1	70.4	84.1	74.2	25.0

Source: http://www.heritage.org/index/ranking

TABLE 4.2 B

COUNTRY	FINANCIAL FREEDOM	PATENT RIGHTS	FREEDOM FROM CORRUPTION	LABOUR FREEDOM
INDIA	40.0	50.0	33.0	74.2
CHINA	30.0	20.0	35.0	55.4

Source: http://www.heritage.org/index/ranking

TABLE 4.2: TRANSPARENCY INTERNATIONAL CORRUPTION INDEX 2011

COUNTRY	INDEX YEAR	OVERALL SCORE	POSITION
INDIA	2011	3.1	95 (dropped eight places)
CHINA	2011	3.6	75

* Based on 17 surveys, ranks 183 countries, 0-highly corrupt, 10 least corrupt/clean.

Source: Economic Times, December 2nd, 2011; pg. 22.

China's overall score is higher than that of India in terms of economic freedom, the key factors which influence a investor's decision to employ capital in a country are less interference from the government, and freedom in terms of factors like; financial, labour, monetary, trade, business etc, as can be seen above India's indices are lower signaling an impediment for economic growth.

4.3 Heritage Foundation in partnership with the Wall Street Journal, US has published **index of micro economic data** for the year 2010-12 for 184 countries, which throws light on country's overall score and its ranking on 11 definite parameters.

TABLE 4.3 A: MICRO ECONOMIC DATA 2012

COUNTRY	INDEX YEAR	OVERALL SCORE
INDIA	2012	54.6
CHINA	2012	51.2

Source: http://www.heritage.org/index/ranking

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TABLE 4.3 B

COUNTRY	TARIFF RATE	INCOME TAX RATE	CORPORATE TAX RATE	POPULATION (MILLION)	GDP (MILLION)
INDIA	7.9	30.9	34.0	1215.9	4060.4
CHINA	4.2	45.0	25.0	1341.4	10085.7

Source: http://www.heritage.org/index/ranking

TABLE 4.3 C

COUNTRY	GDP (PER CAPITA)	UNEMPLOYMENT RATE	INFLATION RATE	FDI INFLOW (MILLION)	TAX BURDEN (% OF GDP)	GOVT. EXP (% OF GDP)
INDIA	3339	10.8	13.2	24639.9	16.8	29.0
CHINA	7519	4.3	3.3	105735	17.5	23.0

Source: http://www.heritage.org/index/ranking

The above data makes it clear that not only china's overall score is higher but its micro economic data is high is also high in comparison to India. This reflects more on country's economic health, being world's second largest economy, high economic growth rate, these data also reflect on overall soundness of its various sectors like manufacturing, service sector, agriculture etc and all this becomes an indicator of favourable business climate.

LABOUR MARKET CONDITIONS

Any company desirous of investment in a nation is affected and influenced by its labour market conditions as it reflects on its production schedules, targets, bottom line, serving the market timely, industrial relations etc. An attempt has been made to understand chief highlights of india's and china's labour market components and how it affects their business environment.

The demographics of the People's Republic of China are identified by a large population with a relatively small youth division, which is partially a result of the People's Republic of China's one-child policy. One consequence of the "one child" policy is that China is now one of the most rapidly aging countries in the world. The population policies were implemented in China since 1979.

China's labor contract law applies to all of China-based employees, foreign or not. The congruity between foreign and Chinese employees recently got even closer with China's very recent (July 1, 2011) enactment of its new *Social Insurance Law*, this law applies equally to Chinese and foreign employees. The new social insurance system will cover the following:

- Pension insurance
- Unemployment insurance
- Work-related injury insurance; and
- Maternity insurance.

According to social insurance law the companies operating in china and employing non-chinese employees in their work force have to make contribution towards social insurance at a pre determined rate and also pay a percentage to Chinese government. This indirectly restricts major IT firms like Wipro, Infosys etc. to seek Chinese market. Currently Chinese to non-Chinese being a liberalized economy still wants to protect the interest of its people.

The outstanding labor market reform issues in China, reforms that took place in the mid 1980s and mid 1990s are believed by many to have made the Chinese labor market more flexible than India's in terms of the ease with which firms can adjust staffing levels to product market and technological developments. Related items of the labor laws in india include the 'service-rules' provisions of the Industrial Employment Act of 1946 and the provisions of the Contract Labor (Abolition and Regulation) Act of 1970. As a way out of such restrictions businesses may resort to contract workers, as per the provision of yet another law, namely, the Contract Labor Act. This law gives state governments the right to abolish contract labor in any industry in any part of the state. In states where recourse to contract labor has been more restricted as a result, keeping employment below the threshold level of 100 employees or contracting out jobs has been the only way of maintaining flexibility in the allocation of manpower.

However, the question of how far difference in this respect explains the performance gap between the two economies has yet to be addressed explicitly. The picture that emerges from a comparison of conventional indicators of availability between the two countries is rather mixed. China clearly has the advantage on adult literacy and school enrollment rates (including those for tertiary education), but India is also believed to have more qualified engineers and other categories (Deutsche Bank Research, 2005).[4] The indicator of firm level skill levels that we use in our performance equations is the proportion of workers that regularly use computers on their jobs.

India has one of the largest pool of scientific and technical manpower. The number of management graduates is also surging. It is widely recognised that given the right environment, Indian scientists and technical personnel can do excellently. Similarly, although the labour productivity in India is generally low, given the right environment it will be good. While several countries are facing labour shortage and may face diminishing labour supply, India presents the opposite picture. Cheap labour has particular attraction for several industries. India ranks 134th in **HDI (Human Development Index)** which is a composite index of life expectancy, literacy, standard of living whereas China ranks 101st out of 187 countries and regions in terms of human development conditions, in 2011 Human Development Report launched by the United Nation Development Programme (UNDP) this has serious consequences on the human capital of india, the country need to develop skilled work force to exploit opportunities existing in the labour market of India.

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[4] India's adult literacy rate stood at 68% against 95% for China in 2003 (Deutsche Bank Research, 2005). The tertiary enrollment rates for the same year were 11% and 13% for India and China respectively.

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	India		
	GDP, current prices, billion $US	GDP, current PPP dollars, bn.	GDP Growth, %
1990	323.5	744.6	5.6
1991	287.2	787.5	2.1
1992	289.7	841.5	4.4
1993	283.2	902.6	4.9
1994	321.6	978.7	6.2
1995	365.0	1072.6	7.4
1996	376.2	1175.6	7.6
1997	421.0	1245.8	4.1
1998	424.4	1335.7	6.0
1999	453.7	1453.4	7.2
2000	476.4	1571.5	5.8
2001	487.8	1669.4	3.9
2002	510.3	1773.8	4.6
2003	591.0	1935.1	6.9
2004	688.7	2157.4	7.6
2005	808.7	2431.2	9.0
2006	908.5	2748.9	9.5
2007	1152.8	3111.3	10.0
2008	1251.4	3377.1	6.2
2009	1264.9	3643.8	6.8
2010	1632.0	4057.8	10.1
2011	1843.4	4469.8	7.8

Source: World Economic Outlook, September 2011

	China		
	GDP, current prices, billion $US	GDP, current PPP dollars, bn.	GDP Growth, %
1990	390.3	910.9	3.8
1991	409.2	1030.0	9.2
1992	488.2	1204.1	14.2
1993	613.2	1403.0	14.0
1994	559.2	1620.3	13.1
1995	727.9	1834.9	10.9
1996	856.1	2056.7	10.0
1997	952.6	2287.6	9.3
1998	1019.5	2493.9	7.8
1999	1083.3	2722.9	7.6
2000	1198.5	3015.4	8.4
2001	1324.8	3339.2	8.3
2002	1453.8	3702.0	9.1
2003	1641.0	4157.8	10.0
2004	1931.6	4697.9	10.1
2005	2256.9	5364.3	11.3
2006	2712.9	6240.8	12.7
2007	3494.2	7333.8	14.2
2008	4520.0	8216.0	9.6
2009	4990.5	9068.2	9.2
2010	5878.3	10119.9	10.3
2011	6988.5	11316.2	9.5

Source: World Economic Outlook, September 2011.

China has a mercantilist policy of export promotion and industrial upgrading, we should remember that before China embarked on its momentous policy shift, it had invested in its people in ways that India still has not. Basic health and education remain India's weak spots, in terms of its development achievements. This is despite national missions and numerous expenditure schemes. Why did China do better? One conjecture is that India's social fragmentation has played a role in its relatively poor performance on basic needs. But fixing this particular problem will require looking inward, not anywhere else[5].

The above data reveals differences in GDP of both countries which indicator of slackened total output of economy of India and inadequate, unskilled labour can be a factor affecting it.

[5] http://www.financialexpress.com/news/column-learning-from-china/912655/6

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ECONOMIC REFORMS

The **economic liberalization in India** refers to ongoing economic reforms in India that started on 24 July 1991. The fruits of liberalisation reached their peak in 2007, when India recorded its highest GDP growth rate of 9%. With this, India became the second fastest growing major economy in the world, next only to China. Organisation for Economic Co-operation and Development (OECD) report states that the average growth rate 7.5% will double the average income in a decade, and more reforms would speed up the pace. India grows at slower pace than China, which has been liberalising its economy since 1978. McKinsey states that removing main obstacles "*would free India's economy to grow as fast as China's, at 10 percent a year*". A case to mention is the latest proposal for single-brand was cleared by Parliament in the winter session, FDI in multi-brand retail was vehemently oppposed by all opposition parties, including UPA ally Trinamool Congress, after which the decision was put on hold by the government. Wal-Mart entered China in 1996 and it took more than a decade for the China operations to become successful[6]. Before the process of reform began in 1991, the government attempted to close the Indian economy to the outside world.

- The low annual growth rate of the economy of India before 1980, which stagnated around 3.5% from 1950s to 1980s, while per capita income averaged 1.3%. At the same time, Pakistan grew by 5%, Indonesia by 9%, Thailand by 9%, South Korea by 10% and in Taiwan by 12%.
- Only four or five licenses would be given for steel, electrical power and communications. License owners built up huge powerful empires.
- A huge public sector emerged. State-owned enterprises made large losses.
- Infrastructure investment was poor because of the public sector monopoly.
- Licence Raj established the "irresponsible, self-perpetuating bureaucracy that still exists throughout much of the country" and corruption flourished under this system.

Since 1978, China began to make major reforms to its economy. The Chinese leadership adopted a pragmatic perspective on many political and socioeconomic problems, and quickly began to introduce aspects of a capitalist economic system. Political and social stability, economic productivity, and public and consumer welfare were considered paramount. In the 1980s, China tried to combine central planning with market-oriented reforms to increase productivity, living standards, and technological quality without exacerbating inflation, unemployment, and budget deficits. Reforms began in the agricultural, industrial, fiscal, financial, banking, price setting, and labor systems.[49]

A decision was made in 1978 to permit foreign direct investment in several small "special economic zones" along the coast. In the early 1980s steps were taken to expand the number of areas that could accept foreign investment with a minimum of red tape, and related efforts were made to develop the legal and other infrastructures necessary to make this work well. The largely bureaucratic nature of China's economy, however, posed a number of inherent problems for foreign firms that wanted to operate in the Chinese environment, and China gradually had to add more incentives to attract foreign capital. This is in contrast to the picture of India when IBM and Coca-Cola had to withdrew in 1976 and could re enter only in 1991.

Economic reforms ushered in china since 1976 onwards and still going on has resulted in liberalization, privatization and globalization of Chinese economy, India after the world economic crisis aggravated by Gulf war of 90's, daunting foreign exchange reserve, flight of capital, liquidity crisis also realized that it is inevitable for her at this juncture to "open up" else perish, as a policy decision the then finance minister Dr. Manmohan Singh announced economic reforms in the form of New Industrial Policy (NIP) 1991 since then Indian economy has undergone sea changes in its economic posture or structure and is still going on. India still has to decide the degree of liberalization and privatization in order to trade-off.

ATTITUDE TOWARDS FOREIGN INVESTMENT

The last indicator of business environment is host government's attitude towards foreign direct investment (FDI), as mentioned above China stared to liberalize its economy much ahead of India in terms of wooing foreign capital, one already knows how imperative it is for the economic growth of a country and at this point china's position and leadership is obvious rather china's has used FDI as a strategic /competitive advantage in making itself a destination for foreign equity participation. An attempt has been made to study the comparative situation of these two countries in recent years.

UNCTAD's World Investment Prospects Survey 2010–2012 provides an outlook on future trends in foreign direct investment (FDI) by the largest transnational corporations (TNCs).

China and India are projected to be world's top two FDI destinations according to a recent survey of transnational corporations, it found that companies see China and India as the world's first and second most important destinations for foreign direct investment over the 2010 to 2012 period, respectively.The World Prospectus Survey 2010-2012 was released by the United Nations Conference on Trade and Development (UNCTAD), showing that China has once again retained title of the world's most important FDI destination. India, meanwhile, overtook the United States to claim the survey's second spot as the U.S. economy continues to struggle.

The figure below shows the top priority host economies for FDI for the 2010 to 2012 period (the number of times that the country is mentioned as a top priority for FDI by transnational corporations). The number in parenthesis is the country's rank in last year's UNCTAD survey.

GRAPH 7.1: TOP PRIORITY HOST ECONOMIES FOR FDI FOR THE PERIOD 2010-2012
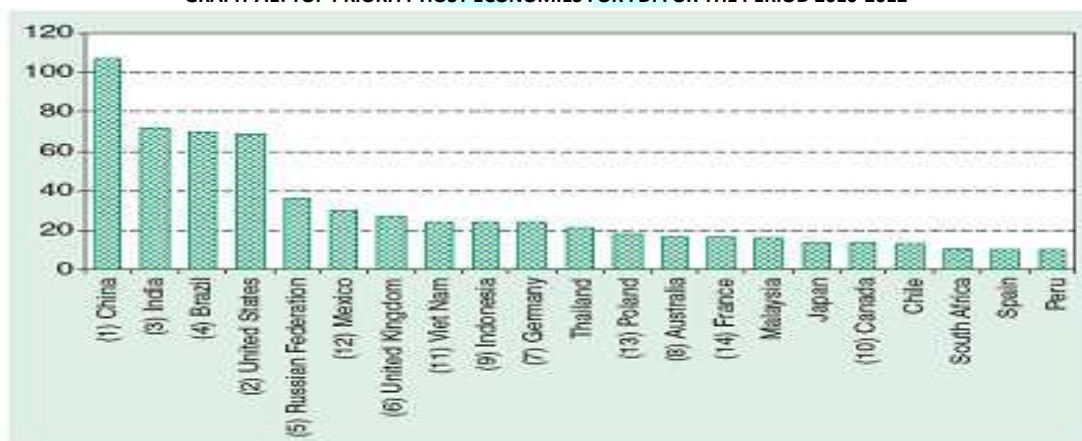
Source: UNCTAD survey.

Note: Rankings according to last year's survey are given in the parentheses before the name of each country. The countries without numbers were ranked outside the top 20 in the last year's survey.

Source: http://www.2point6billion.com/news/2010/09/07/china-and-india-are-worlds-top-two-fdi-destinations-un-survey-7026.html.

The above data makes it apparent that china enjoys a favourable position in terms of FDI and is ranked number one destination for investment over years. This points out to favourable business environment of china in comparison to India.

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[6]http://www.2point6billion.com/news/2012/02/02/india-and-chinas-retail-industries-compared-10759.html.

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MARKETING BASE

India has just liberalized its single brand retail to permit 100 percent foreign investment. A comparison of India and China's retail markets reveals some lessons for retailers in both markets. According to **International retail development rankings,** India ranks **fourth** globally for retail development on the 2011 Global Retail Development Index (GRDI), a study by global management consulting firm A.T. Kearney. As far as the retail industry is concerned, India is standing at the brink of a great economic opportunity.[7] In *the Goldman Sachs BRIC (Brazil, Russia, India and China) report,* India is predicted to be amongst the top three economies in the world by 2050, along with China and Brazil.

Meanwhile, China's retail development ranking took a dramatic fall from first in 2010 to sixth place in 2011. China's drop in the rankings (to where it now ranks below Kuwait) is quite surprising considering the country's impressive growth statistics.

India and China's Organized Retail Market Shares
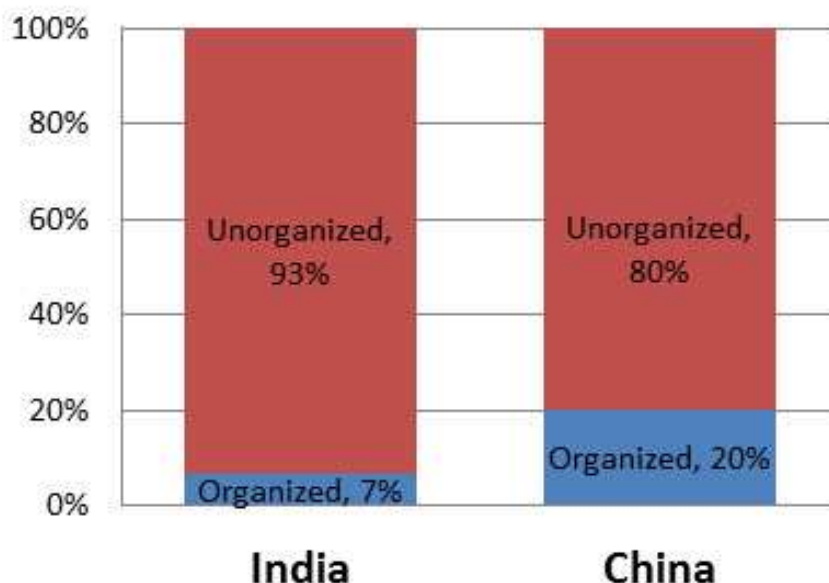
Source: 2011 A.T. Kearney Global Retail Development Index

So why the big fall? Differences in demographics are a significant factor separating the two countries, with India's young population holding great future potential.

India is currently in what demographers call the "sweet spot," when the dependency ratio is low, resulting in a society with a huge population of people aged 15-65. For retailers, this **sweet spot** means a healthy stock of consumers poised to spend on a wide range of goods. While China is reaching the peak of this demographic phase, India can expect to stay in the so-called sweet spot until 2037 and harness this **demographic dividend**, China might slide down after 25-30 years span of time with those of working age and the increasing number of women in the workforce posed as dominant consumer groups.

Yet, according to the report, the main reason for China's slide in the GRDI rankings is high retail market saturation. As China developed rapidly after the reform and opening policy, so did its retail market. Foreign retailers entered retail markets not only in first-tier cities like Beijing and Shanghai, but also in second-tier and even third and fourth-tier cities. Corporate talk now is of expanding even further, drilling down into China's heartland of tiers five to seven – even taking in cities with populations of just 1-2 million.

In India, both Indian and foreign retailers are expanding outside Bangalore and Mumbai into India's growing second and third-tier cities, and now into rural areas. In addition to the draws of increasing salaries, double income group, economic growth, unsaturated markets, educated class, changing life style patterns and attractive real estate prices and availability, such areas are also seeing significant transportation and infrastructure developments that are paving the way for increased investment.

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[7] Suja Nair, Retail Management, p. 12. 3rd Edition, Himalya Publishing House Pvt. Ltd.

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India's 2011-2012 Economic Outlook: Key Points
(Indian Economic Advisory Council)

	2010-2011	2011-2012 (Proj.)
GDP growth	8.5%	8.2%
Agriculture	6.6%	3.0%
Industry	7.9%	7.1%
Services	9.4%	10.0%
Investment rates	36.4% of GDP	36.7% of GDP
Domestic Savings	33.8% of GDP	34.0% of GDP
Current account deficit	US$44.3 bn (2.6% of GDP)	US$54.0 bn (2.7% of GDP)
Merchandise trade deficit	US$130.5 bn (7.6% of GDP)	US$154.0 bn (7.7% of GDP)
Invisible trade surplus	US$86.2 bn (5.0% of GDP)	US$100.0 bn (5.0% of GDP)
Capital flows	US$61.9 bn	US$72.0 bn
FDI inflows	US$23.4 bn	US$35.0 bn
FII inflows	US$30.3 bn	US$14.0 bn
Accumulation to reserves	US$15.2 bn	US$18.0 bn

GDP Growth by Sector (%, Constant Prices)
Indian Economic Advisory Council

	'07-'08	'08-'09	'09-'10	'10-'11	'11-'12 (Proj.)
Agriculture and allied activities	5.8	-0.1	0.4	6.6	3.0
Mining and quarrying	3.7	1.3	6.9	5.8	6.0
Manufacturing	10.3	4.2	8.8	8.3	7.0
Electricity, gas and water supply	8.3	4.9	6.4	5.7	7.0
Construction	10.7	5.4	7.0	8.1	7.5
Trade, hotels, transport, storage and communication	11.0	7.5	9.7	10.3	10.8
Finance, insurance, real estate and business services	11.9	12.5	9.2	9.9	9.8
Community and personal services	6.9	12.7	11.8	7.0	8.5

The onus is now on Indian businesses to expand and develop this market. With more diverse and unique consumer behavior in these regions, even the biggest retailers have diversified their marketing strategies and retailing formats to adapt to what Professor Anil Gupta of the Indian Institute of Management describes as a more discerning and less impulsive consumer who takes time to explore, understand and discuss before finally purchasing.

The India Brand Equity Foundation (IBEF) expects government initiatives to increase rural employment and access to credit to contribute to higher consumer spending in the near future. Given that India's demographic advantage and liberalization of the Indian market now represents an additional investment challenge and opportunity for global retailers which once produced high returns in China. Developed economies with saturated markets, shrinking market base, excess capital and technology are now eyeing developing economies like India which have high population growth and excess labour both skilled and unskilled, this creates a *win-win strategy* for both nations.

CONCLUSION

The PREAMBLE to the Indian constitution inserted the word **SOCIALIST** in 1956 and since then government's interference on all fronts can be seen in the economy. On the other side the economic reforms taken up in 1991 have redefined the role of government in economic affairs and how far the government's role is diluted has to be tested in coming years given the compulsion to globalize, liberalize, privatize and dereserve.

Although Indian economy has given up over dose of regulation (*one should not forget that India could weather global economic crisis, September 2008-2010 due to tightly regulated economy*) as compared to pre 1991. Bureaucratic control, red tapism, procedural complexities and impediments, multiplicity of laws, nepotism, delayed decision making, political uncertainties, attitude, cultural beliefs of social group, value system, xenophobia of people are some of the key factors which have retarded India's growth and made India lag behind as compared to its contempories. There are numerous examples like TATA's Nano plant, ENRON project etc which clearly reveal the loss made to nation due to the above reasons, its time for India to rectify and learn from previous experiences. There is no doubt that we compare better to most developed countries of the world.

Arguably, China's successful embrace of one form of capitalism ("to get rich is glorious") in 1978 ultimately played a role in steering India's path of economic reform. Since then, China has often served as a benchmark for judging India's progress, because it is the only other country that matches India in population size. Sorting out the lessons from China's experience is always useful. China has also pursued, at various times, trade liberalisation, fiscal discipline, tax reform and restructuring of government expenditure priorities, in addition to liberalising foreign investment. India has also done much in these dimensions, except perhaps improving the quality of government expenditure. In these dimensions, India is not learning from China, so much as learning from basic economic principles.

India is now the fourth-largest economy behind the US, China and Japan. Numbers from 2010 show that the Japanese economy was worth $4.31 trillion, with India snapping at its heels at $4.06 trillion, **"India can topple Japan to become the third-largest economy in the world"** at purchasing power parity. This is a positive sign for India.

The question or debate should not be confined to china versus India or vice versa rather India and china working in *collaboration and complimenting* each other on all fronts to become emerging world powers and India should learn from china's success, because it did it *fast and much ahead* of others. But the real test for

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India still remains **from being closed and conservative to becoming dynamic and liberal !** Its time for India to **OPEN UP AND OPEN UP IN RIGHT DIRECTION AND ATTITUDE!**

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EMPLOYEE ABSENTEEISM ITS IMPACT ON PRODUCTIVITY WITH REFERENCES TO SUKJIT SCRATCH MILLS AT NIZAMABAD

CH.R.S.CH.MURTHY
ASST. PROFESSOR
SCHOOL OF MANAGEMENT SCIENCE
SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
GHATKESAR

ABSTRACT
Absenteeism is a vital issue that requires immediate attention by both employers and employees. Employees should enjoy the work they are doing and employers on their part should help them in whatever way they can to make their experience a pleasant one. Absenteeism is a habitual pattern of absence from a duty or obligation. Absenteeism among worker is not only from point of view of cost concept, but it is important from the point of morale of employees. Frequent absence from the workplace may be indicative of poor morale or of sick building syndrome. Samples of respondents are interviewed with the help of structured questionnaire and data is presented in the form of tabulations with statistical tools. Thus the objective of this research paper is to identify the reasons behind absenteeism of employees, impact of absenteeism on productivity at Sukhjit Starch Mills at Nizamabad.

KEYWORDS
Absenteeism, Morale, Productivity.

INTRODUCTION

It has been observed that the phenomenon of absenteeism does not exist only on the Indian industry; it is a universal fact. The difference is only in terms of magnitude. The extent of absenteeism may differ from industry to industry, place to place and occupation to occupation. Absenteeism may be extensive in a particular department of an industry (or a concern). The absenteeism among the younger workmen is extensive on Mondays after the weekend, particularly among unmarried men who, after a late night on Sunday, perhaps with girl friends, fine it difficult to get up and come to on time and concentrate on work; and it is lowest on pay day.

The extent of absenteeism is greater among youngsters than among the older employees, greater among women than men. Youngman are generally found to absent for a variety of reasons, including restlessness and a sense of irresponsibility. In some cases, absenteeism of particular workers is due to reasons connected with a job, as a worker does not like his job or he has unsatisfactory relations with his supervisor or with other employees. Absenteeism may also be due to sickness, real or feigned.

REVIEW OF LITERATURE

According to Nelson & Quick (2008) people who are dissatisfied with their jobs are absent more frequently. They went on to say that the type of dissatisfaction that most often leads employees to miss work is dissatisfaction with the work itself.

Gilbert E. Moore has defined as, "Absenteeism as man shifts lost by employees due to avoidable reasons and with out obtaining prior permission of the supervisor".

Gibson (1966) remarks that a plausible idea relating to the size of the organization influences absence rates; in larger organizations, since there is greater division of labor, there is also more concealment of the contributions of individuals.

NEED FOR THE STUDY

The absenteeism among the employees in industry is more dangerous to its economy than any other factor. Hence this project helps to identify the reasons for absenteeism and suggest ways to reduce the impact of the absenteeism on overall performance of Sukhjit Starch Mills at Nizamabad.

OBJECTIVES OF THE STUDY
o   To identify the reasons behind absenteeism of employees at Sukhjit Starch Mills at Nizamabad.
o   To find out the impact of absenteeism on productivity in Sukhjit Starch Mills at Nizamabad.

HYPOTHESIS
The following hypotheses have been chosen to achieve the stated objectives of the research.
✓   Null Hypothesis (μo):   There is positive effect on productivity due to absenteeism At SUKHJIT STARCH MILLS AT NIZAMABD
✓   Alternative Hypothesis (μ1): There is negative effect on productivity due to absenteeism At SUKHJIT STARCH MILLS AT NIZAMABD

METHODOLOGY
DATA SOURCE
The present research being descriptive in nature mainly depends upon primary and secondary sources of data. The secondary information is collected from Journals, Thesis, reports and websites. Primary data was collected using the structured questionnaire.
RESEARCH INSTRUMENT
The questionnaire is fully structured. The field work was carries for a period of 2 months. The approximate time taken to fill a questionnaire is two to three days. To study the opinion of the respondents towards engagement in organizational policies, a five-point scale (Strongly agree, Agree, Neither agree or nor disagree, Disagree, Strongly disagree) is adopted to study the relationship and variation of respondents.
SAMPLING PROCEDURE AND SAMPLE SIZE
The sampling procedure chosen for the study is simple random sampling. A sample of 10 respondents was taken for the study.
STATISTICAL TECHNIQUES USED FOR ANALYSIS
The data is analyzed by using Mean, Standard Deviation, Coefficient of Variation and Coefficient of correlation. The methodology adopted for collecting the primary data is through questionnaire method. Questionnaire is designed using objective type questions mostly of multiple choices, keeping in view the time availability at the disposal of the decision maker. Questions designed are simple and specific, to generate response according to the objectives. Questionnaire is arranged in a logical order, logical to the respondent and proper care has been taken to avoid ambiguity in responses and at the same time enabling the respondents to answer the questions easily and quickly with the time available at their disposal.

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LIMITATIONS OF THE STUDY

Some of the respondents may be biased towards the responses given. Some of the responses given may not be the true indicative of their preferences and influences on the performance. This can happen as the questionnaire is highly structured, and there is a possibility of the respondents choosing one of the alternatives at random mechanically without applying much thought. This study is limited to Sukhjit Starch Mills, Nizamabad, hence, the results of the study cannot be generalized. Due to time and cost constraint, the study is restricted only to certain selected respondents all are educated.

RESULTS AND DISCUSSIONS

CALCULATION OF RATE OF ABSENTEEISM

Absenteeism rate for the period =

$\dfrac{\text{Total number of man days lost due to absenteeism in the period}}{\text{Total number of working man days available in the period}}$ *100

Month	Total No. of Lost Days (A)	Total No. of Working Days (B)	(A)/(B)
July -10	630	5460	11.53%
August - 10	420	5460	07.69%
September-10	630	5250	12.00%
October-10	1050	5250	20.00%
November-10	840	5250	16.00%
December-10	630	5670	11.11%
January-11	840	5250	16.00%
February-11	840	4620	18.18%
March-11	630	5250	12.00%
April-11	840	5460	15.38%
May-11	840	5460	15.38%
June-11	630	5460	11.53%

RATE OF ABSENTEEISM FOR THE YEAR JULY 10- JUNE 11) IS AS FOLLOWS

$\dfrac{\text{SUM OF RATE OF ABSENTEEISM FROM JULY -10 TO JUNE-11}}{\text{NUMBER OF MONTHS i.e. 12 MONTHS}}$

= $\dfrac{11.53\%+7.69\%+12\%+20\%+16\%+11.11\%+16\%+18.18\%+12\%+15.38\%+15.38\%+11.53\%}{12}$

= $\dfrac{166.8\%}{12}$ = 13.9%

Therefore, the rate of absenteeism at Sukhjit Starch Mills at Nizamabad for the academic year 10-11 is 13.9%.

TESTING HYPOTHESIS

Null Hypothesis (μ_o): There is positive effect on productivity due to absente At SUKHJIT STARCH MILLS AT NIZAMABD.

Alternative Hypothesis (μ_1): There is negative effect on productivity due to absenteeism At SUKHJIT STARCH MILLS AT NIZAMABD

MONTH	MONTH WISE ACTUAL PRODUCTION (X)	MONTH WISE STANDARD PRODUCTION	$X-\bar{X}$	$(X-\bar{X})^2$
JULY(10)	3726.3	3250	220.133	48458.53
AUG(10)	4062	3250	555.833	308950.3
SEP(10)	3610.2	3125	104.033	10822.86
OCT(10)	2622.8	3125	-883.367	780337.2
NOV(10)	3359.8	3125	-146.367	21423.29
DEC(10)	3648.4	3375	142.233	20230.22
JAN(11)	3482.9	3125	-23.267	541.353
FEB(11)	3493.3	2750	-12.867	165.559
MAR(11)	3567.4	3125	61.233	3749.480
APR(11)	3470.9	3250	-35.267	1243.761
MAY(11)	3430	3250	-76.167	5801.411
JUN(11)	3600	3250	93.833	8804.631
	ΣX=42074			$\Sigma(X-\bar{X})^2$=1210528.7117

$t = \dfrac{X - \mu}{S} \sqrt{n}$

$\bar{X}$ = mean of the actual production

μ = mean of the standard production

$S = \sqrt{\Sigma(X-\bar{X})^2 / N-1}$

n = no. of months

$\bar{X} = \dfrac{\Sigma X}{N}$

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$$= \frac{42074}{12}$$

$$= 3506.167$$

$$S = \sqrt{[\Sigma(X - \bar{X})^2 / N-1]}$$

$$= \sqrt{(1210528.7117 / 12-1)}$$

$$= \sqrt{110048.0647}$$

$$= 331.7349$$

$$t = \frac{\bar{X} - \mu}{S} \sqrt{n}$$

$$= \frac{3506.167 - 3166.667}{331.7349} \sqrt{12}$$

$$= 3.5452$$

The calculated value of t is greater than the table value at 1% level of significance 11 degrees of freedom i.e., the table value of $t_{.005}$=3.106 < 3.5452 the calculated value. Therefore the null hypothesis is rejected.

CALCULATION OF COEFFICIENT OF CORRELATION BETWEEN THE PRODUCTIVITY AND ABSENTEEISM

ΣX=50.784 , ΣY=166.8
Σx^2=43.4531160, Σy^2=133.5312
Σxy=60.3750100

$$r = \frac{\Sigma xy}{\sqrt{(\Sigma x^2 * \Sigma y^2)}}$$

$$= 0.7926024$$

Since the r<1 there exists a correlation coefficient between the productivity and absenteeism.

SIGNIFICANCE TEST FOR CORRELATION

T-test for the coefficient of correlation between productivity and absenteeism

$$t = \frac{r}{\sqrt{(1-r^2)}} \sqrt{(n-2)}$$

$$= \frac{0.7926024}{\sqrt{\{1-(0.7926024)^2\}}} \sqrt{12-2}$$

$$= \frac{0.7926024}{\sqrt{\{1-0.6282185\}}} \sqrt{10}$$

$$= \frac{0.7926024}{\sqrt{0.3717815}} * 3.1622777$$

$$= \frac{0.7926024}{0.60973887} * 3.1622777$$

$$= 1.2999*3.1622777$$

$$= 4.11064478223$$

Since the calculated is greater than the table value we reject the null hypothesis i.e., table value of $t_{.005}$ = 3.169 < t_{cal} =4.11 we accept the alternative hypothesis that there is negative effect on productivity due to absenteeism.

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IMPACT OF ABSENTEREISM ON PRODUCTIVITY

MONTH	ABSENTEEISM (in %)	PRODCTIVITY (in %)
JULY'10	11.53	4.763
AUG '10	7.69	8.12
SEP '10	20	-5.022
OCT '10	12	4.852
NOV '10	16	2.348
DEC '10	11.11	2.734
JAN '11	16	3.579
FEB '11	18.18	7.433
MAR '11	12	4.24
APR '10	15.38	2.209
MAY '10	15.38	1.8
JUN '10	11.53	3.5
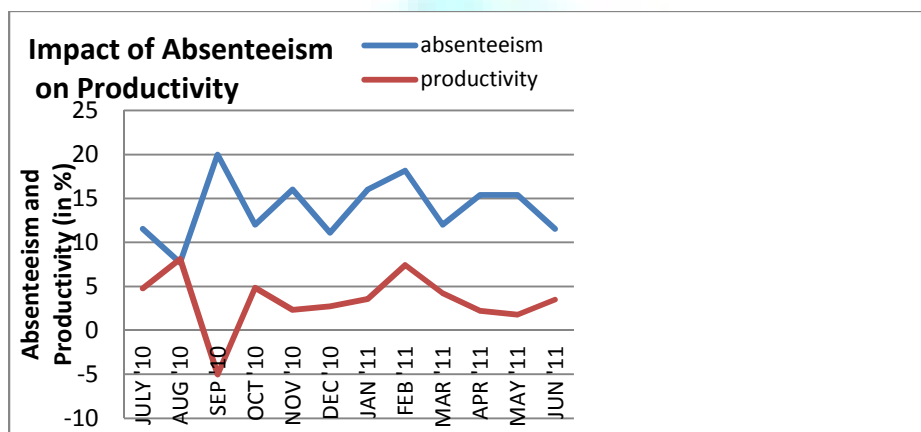
FINDINGS

- 80% of the employees agree that low pay is the reason for their absenteeism.
- 70% of the employees stated that absenteeism is because of stress involved in the job.
- 65% of the employees stated that their absenteeism is because of health problems
- 80% of the employees are taking leave with prior intimation to the management.
- 90% of employees are satisfied with the work hours and they feel that it is not affecting their absenteeism.
- 50% of the employees agree that the benefits provided by the company are satisfactory.
- 80% of the employees are feeling that their job is secured.
- Oct-10 is the month where the rate of absenteeism was higher (20%), which affected the productivity with a difference of 5.022%.

CONCLUSION

The study concluded that providing positive incentives to employees in the form of those motivational factors that normally influence employees to be absent is better than imposing penalties for discouraging absenteeism. Employees are influenced to a lesser extent by loss of pay imposed by the organization. Finally a combination of incentives (additional time off) and penalties (loss of benefits or job) with the primary emphasis on motivational incentives is the most effective approach to reducing absenteeism.

The rate of absenteeism maintained by the organization is good i.e., the rate of absenteeism for July 10-June11.

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A STUDY OF THE IMPACT OF MACROECONOMIC VARIABLES ON STOCK PRICE MOVEMENTS FOR THE PERIOD 1993- 2010

ZOHRA ZABEEN SABUNWALA
ASST. PROFESSOR
INDIRA SCHOOL OF BUSINESS STUDIES
PUNE

ABSTRACT

This paper is a fresh attempt to unravel the relationship between the real economic variables and the capital market in Indian context. The paper considers the monthly data of several economic variables like the national output, fiscal deficit, interest rate, inflation, exchange rate, foreign institutional investment in Indian markets between 1994 and 2010, and tries to reveal the relative influence of these variables on the sensitive index of the Bombay stock exchange (BSE). I have applied linear regression model to identify the relationship between BSE stock price movement and macro-economic variables. The finding shows that certain variables like the interest rate, output, money supply, inflation rate and the exchange rate has considerable influence in the stock market movement in the considered period, while the other variables have very negligible impact on the stock market.

KEYWORDS

Bombay Stock Exchange (BSE), Macroeconomic variables, Stock Price Movement.

INTRODUCTION

Indian capital market has undergone tremendous changes since 1991, after the government introduced liberalization and globalization more seriously than ever before. As a result, there can be little doubt about the growing importance of the stock market from the point of view of the aggregate economy. Indian capital markets have evolved as a major source of raising resources for Indian corporate. The total market capitalization of Bombay Stock Exchange's (BSE) has magnified significantly. The huge influx of capital through FIIs has made India a favourite avenue of investment for global investors.

Not only has the stock market activity increased relative to the real economy, but also it appears that the inter-relationship between them has strengthened. The various macroeconomic factors seem to be having a significant impact on the stock price movements.

Keeping all these factors in mind, it becomes necessary to test the link between the real economy and stock market. This research paper attempts to study the relationship between stock prices and certain real economic variables like index of industrial production (IIP), inflation through Wholesale Price Index (WPI), interest rate (IR), fiscal deficit (FD), foreign institutional investment (FII) in the capital market, foreign exchange rate of rupee (ER) etc. using multiple regression techniques.

REVIEW OF LITERATURE

An increasing amount of empirical evidence noticed by several researchers leads to the conclusion that a range of financial and macroeconomic variables can predict stock market returns (for a selection of recent studies see e.g. Campbell, 1987, French, Schwert and Stambaugh, 1987, Fama and French, 1989, Balvers, Cosimano and McDonald, 1990, Been, Glosten and Jaganathan, 1990, Cochrane, 1991, Campbell and Hamao, 1992, Ferson and Harvey, 1993, Glosten, Jaganathan and Runkie, 1993 and Pesaran and Timmerman, 1995, 2000). Also I have referred to the study done by Ray, Prantik and Vani, Vina "What Moves Indian Stock Market: A Study on the Linkage with Real Economy in the Post-Reform Era ". Standard stock valuation models predict that stock prices an affected by the discounted value of expected cash flows. Chen et al (1986) and Fama (1990) have shown real economic activity, interest rate and stock returns to be correlated. However, most of these earlier studies focus upon the short-run relationship between stock market and financial and macro-economic variables, which may remove important information contained in the permanent component of economic activity concerning the evolution of short-run movements.

In comparison to the above, long-run relationship between stock market and the economic variables has received little attention of researchers except in Mukherjee, Naka, (1995), Chung & Ng (1998), Maysami and Koh (2000) and Nasseh and Strauss (2000). By using the concept of co integration, first introduced by Eangle and Granger (1987), we can investigate the empirical long run relationships between stock market indices and both measures of economic activity and financial variables. Co integration between stock prices and economic activity can be seen to be consistent with both internal & theoretical consumption and production-based asset pricing models. These models suggest that stock prices are related to expected future production through effect on the discounted value of changes in cash flows and dividends (Cochrane).

Recently several researchers like Baestaens et. al. (1995), Kaastra Ibeling and others (1996), Katsurelis (1998), Kamath (1999 and 2002) recommend the use of Artificial Neural Network (ANN) for investigating the co integrating relationship as well as forecasting in capital markets, which has tremendous promise in terms of methodology.

There have been several studies on this in Indian context. Sharma Kennedy (1977) and Sharma (1983) test the weak-form efficiency of the BSE. Both of these studies with the former covering the 1963-1973 period and the later encompassing the 1973-1971 period, conclude that Indian stocks generally conformed to random-walk behaviour in that successive period changes were independent. Poterba & Summers (1988), however, find evidence of mean reversion in Indian stock prices, suggesting a deviation from random-walk behaviour. Darat & Mukherjee (1987) apply a vector auto regression model (VAR) along with Akaike's final prediction ever on the Indian data over 1948- 1984 and find that a significant causal relationship (in the sense of Granger, 1969) exists between stock returns and selected macro-economic variables.

Naka, Mukherjee and Tufte (1996) have analyzed relationship among selected macro-economic variables and the Indian stock market. By employing a vector error correction model, they find that domestic inflation and domestic output are the two most prominent factors influencing stock prices. In a recent study under NSE Research Initiative Kamath (2002, paper no. 10) uses Artificial Neural Network (ANN) to examine the relationship of macro-economic factors to the returns of individual assets. The BSE SENSEX as well as some individual stock has been examined. More recent studies like Bhattacharya & Mukherjee (2002), Rao & Rajeswari (2000), Pethe & Karnik (2000) use advanced methods in econometrics to study the same relationship. Bhattacharya and Mukherjee (2002) test the causal relationships between the BSE SENSEX and five macroeconomic variables applying the techniques of unit-root tests, co integration and long-run Granger non-causality test proposed by Toda and Yamamoto (1995). Their major findings are that there are no causal linkage between the stock prices and money supply, national income and interest rate while the index of industrial production leads the stock price and there exists a two-way causation between stock price and rate of inflation.

Rao & Rajeswari (2000) try to explore the role being played by a good number of macro- economic variables in influencing the stock market when reduced into a manageable number of economic factors. They test the risk-return relationship for individual scrip for the 1995-2000 period using the traditional CAPM, three-factor macro-economic factor model and the five-factor APT. Pethe and Karnik (2000) use unit-root, co-integration and error-correction models to test relationship between stock market behavior and some macro-economic variables.

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NEED/IMPORTANCE OF THE STUDY

The stock market indices are the barometers of the stock performance of companies/ industries. The stock price movements reflect the directions in which the stock markets are moving. The study will have many advantages for several stakeholders like academicians and practitioners can know the precise macro variables that influence the stock prices and also the nature of the relationship then understanding and predicting stock market behavior would be much simpler with the help of these economic variables. For the policy-makers, it may help in formulating rational policy based on macro economic scenario. Also, managers may make appropriate investment or managerial decisions based on the influence that these macroeconomic factors exert on stock price movement.

STATEMENT OF THE PROBLEM

To study the impact of the given macroeconomic variables like WPI, IIP, FII, FISCAL DEFICIT, EXCHANGE RATE, INTEREST RATE on BSE SENSEX movement.

OBJECTIVE

1. To study the extent of impact of macroeconomic variables like WPI, IIP, FII, FISCAL DEFICIT, EXCHANGE RATE, INTEREST RATE on stock price movements in India
2. To study the nature of impact of macroeconomic variables like WPI, IIP, FII, FISCAL DEFICIT, EXCHANGE RATE, INTEREST RATE on stock price movements in India

HYPOTHESIS

H0: WPI, IIP, FII, FISCAL DEFICIT, EXCHANGE RATE, INTEREST RATE does not significantly impact the BSE SENSEX MOVEMENT
H1: WPI, IIP, FII, FISCAL DEFICIT, EXCHANGE RATE, INTEREST RATE significantly impact the BSE SENSEX MOVEMENT

RESEARCH METHODOLOGY

The objective of the current study is to unravel the linkage between the stock market movement and real economic events in the Indian context in the post reform-era using linear regression techniques like multiple regressions. The period of the study has been chosen as April, 1994-March, 2010. This has been the period where the economic reforms were making an impact on the economy. In an earlier study, Vani & Ray (2003) try to capture the change in the relationship among macro-economic variables and stock prices over the years. The earlier study uses average yearly data for the period 1971-2002 and chosen macroeconomic variables were Interest Rate (Bank rate), Industrial Activity (Index of industrial production), Inflation (Whole sale price index), Fiscal deficit, and GDP. The author found significant causal relationship between the macro economy and the BSE SENSEX movements. The present study is more focused on the post-reform era as it considers the period 1994-2010 and uses monthly data for a larger number of variables from the real economy which should have relationship with the capital market. Not only the domestic economic variables have been considered but the linkage with the external world through the exchange rate movement has also been included in the analysis. The study does not assume any a priori relationship between these variables and the stock market and is open to the possible two-way relationship between them.

SELECTION OF VARIABLES AND DATA COLLECTION

The aim is to detect relationship between real economic variables and the Sensitive Index (SENSEX) Bombay Stock Exchange, India's premier stock exchange for which data is available for a long period. The period I have chosen is April, 1994-March, 2010 as the monthly data of all of the variables are available for this period and we can have normalized reliable data for the same period as many of the indices like Wholesale Price Index or Index of Industrial Production have their base as 1993-94. I have chosen the variables following Chen, Roll & Ross (1986) on what they have described as "simple and intuitive financial theory" as there does not appear to exist any theory that accounts for stock price (BSE) movements as a function of micro- and macro-indices. I have selected seven non-equity-related real economic variables as systematically affecting stock returns (as given in Table 1).

I have taken Index of Industrial Production (IIP) that reflects the industrial growth in India as the proxy for national output. Since it's difficult to find any benchmark interest rate for the entire time period under study, I have taken the SBI Prime Lending Rate (SBIPLR) as the proxy for the interest rate (IR) prevailing in the economy. To account for inflation we have chosen Wholesale Price Index (WPI) with base year as 1993-94. Indian economy has some unique features since Government account has a very prominent role in the economy. To capture this in the model, fiscal deficit (D) has been taken as a macro variable affecting the stock prices. To test the common perception that the FII has been a driver to the stock market in India I have included Foreign Institutional Investment in Indian capital market (FII) as another crucial economic variable. To check the linkage with the external world Rs./$ Exchange Rate (ER) has been taken as another variable. All the data is taken from the Handbook on Statistics (RBI) and Economic Survey (Government of India) and Business Beacon.

TABLE1: VARIABLES USED IN RESEARCH

IIP	Index of Industrial production	Index with base year as 1993-94
FD	Fiscal Deficit of the Central Government	Actual Value
FII	Foreign Institutional Investment in Capital Markets	Actual Value
ER	Monthly Average Rs./$ Exchange Rate	Actual Value (Monthly Average)
BSE	BSE SENSEX	Index with base year as 1978-79 (Monthly Average)
IR	SBI Prime Lending Rate	Percentage
WPI	Wholesale Price Index	Index with base year as 1993-94

Source: Chen, Roll & Ross (1986)

RESULTS & DISCUSSION

1.   REGRESSION EQUATION

$Y = -0.017 + 0.045 X_1 - 0.029 X_2 + 0.063 X_3 + 0.087 X_4 - 0.226 X_5 - 0.173 X_6$………. (1)

$X_1 = $ PLR
$X_2 = $ IIP
$X_3 = $ FISCAL DEFICIT
$X_4 = $ FII
$X_5 = $ EXCHANGE RATE
$X_6 = $ WPI

The knowledge that the most influencing variables to the Indian Stock Market during 1994-2010 have been the exchange rate, index of industrial production (IIP), interest rate (IR) and inflation rate (WPI), is not surprising. Economists and financial researchers have long been suspecting that there should be strong linkages between the capital market and the real economy. Studies show that non-linear model better explain the linkages between capital market and macro-economic variables but since we have limited ourselves to linear regression model, it shows a weak result**.**

2.   CORRELATION ANALYSIS

From the Table 2 we can easily find out to what extent one variable is linearly associated with another variable. Here, higher correlation is seen between BSE and WPI showing -.200 which means higher the WPI lower be the SENSEX movement, BSE and FII has .122 which means if FII increases by 1 unit than SENSEX

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would move by .122 and BSE and exchange rate has -.266 that again shows negative relationship, i.e if exchange rate increases by 1 unit, SENSEX would move down by .266 units. Other variables are showing weak relationships.

TABLE 2: CORRELATION ANALYSIS

		NORMAL of lagbse using RANKIT	NORMAL of lagPLR using RANKIT	NORMAL of lagIIP using RANKIT	NORMAL of lagfiscaldeficit using RANKIT	NORMAL of lagfii using RANKIT	NORMAL of lagexcahngerate using RANKIT	NORMAL of lagwpi using RANKIT
Pearson Correlation	NORMAL of lagbse using RANKIT	1.000	-.004	.030	.054	.122	-.266	-.200
	NORMAL of lagPLR using RANKIT	-.004	1.000	-.075	-.036	-.064	.082	.079
	NORMAL of lagIIP using RANKIT	.030	-.075	1.000	.126	-.093	-.046	-.296
	NORMAL of lagfiscaldeficit using RANKIT	.054	-.036	.126	1.000	-.095	-.049	.051
	NORMAL of lagfii using RANKIT	.122	-.064	-.093	-.095	1.000	-.124	-.058
	NORMAL of lagexcahngerate using RANKIT	-.266	.082	-.046	-.049	-.124	1.000	.145
	NORMAL of lagwpi using RANKIT	-.200	.079	-.296	.051	-.058	.145	1.000
Sig. (1-tailed)	NORMAL of lagbse using RANKIT	.	.480	.354	.254	.066	.000	.006
	NORMAL of lagPLR using RANKIT	.480	.	.177	.329	.215	.155	.166
	NORMAL of lagIIP using RANKIT	.354	.177	.	.060	.124	.285	.000
	NORMAL of lagfiscaldeficit using RANKIT	.254	.329	.060	.	.119	.272	.265
	NORMAL of lagfii using RANKIT	.066	.215	.124	.119	.	.062	.238
	NORMAL of lagexcahngerate using RANKIT	.000	.155	.285	.272	.062	.	.036
	NORMAL of lagwpi using RANKIT	.006	.166	.000	.265	.238	.036	.

*Significant at 95% Confidence Level

Source: results of the panel data run on SPSS

TABLE 3: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.682(a)	.465	.408	.9409855	1.423

Source: results of the panel data run on SPSS

As can be inferred from the above Table 3, the adjusted R-square value is 0.428 which means the model explains 40.8 percent of variation. Also, the Durbin Watson test shows that the value is 1.423 , slightly less than 2 showing a slight positive correlation but is otherwise tested and cured from autocorrelation using method of difference (by calculating lag and lead values).

TABLE 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.197	6	2.699	3.049	.008ᵃ
	Residual	131.047	148	.885		
	Total	147.244	154			

Source: results of the panel data run on SPSS

The ANOVA Table 4 shows that the model is a good fit at the sig. level of 0.008.

TABLE 5: COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.017	.076		-.229	.819		
	NORMAL of lagPLR using RANKIT	.045	.102	.034	.440	.661	.981	1.019
	NORMAL of lagIIP using RANKIT	-.029	.081	-.030	-.362	.718	.880	1.136
	NORMAL of lagfiscaldeficit using RANKIT	.063	.077	.065	.818	.414	.964	1.037
	NORMAL of lagfii using RANKIT	.087	.077	.089	1.119	.265	.959	1.043
	NORMAL of lagexcahngerate using RANKIT	-.226	.078	-.231	-2.911	.004	.957	1.045
	NORMAL of lagwpi using RANKIT	-.173	.081	-.176	-2.135	.034	.880	1.136

*Significant at 95% Confidence Level

Source: results of the panel data run on SPSS

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As can be inferred from the above Table 5 that only WPI and EXCHANGE rate have significant less than .05 which means that only WPI and EXCHANGE RATE explains the impact to a significant extent that is standardized beta of -0.176 of WPI shows that if WPI is increased by 1 unit, BSE SENSEX would move down by 0.176. Similarly, if we increase exchange rate by 1 unit, BSE SENSEX would move down by 0.231 units. Rest of the variables does not seem to impact the dependent variable to any significant extent. However, the problem lies in choosing the linear model as the impact of macroeconomic variable is better explained by nonlinear model.

TABLE 6: COLLINEARITY DIAGNOSTICS

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | | | |
				(Constant)	NORMAL of lagPLR using RANKIT	NORMAL of lagIIP using RANKIT	NORMAL of lagfiscaldeficit using RANKIT	NORMAL of lagfii using RANKIT	NORMAL of lagexcahng erate using RANKIT	NORMAL of lagwpi using RANKIT
1	1	1.409	1.000	.00	.08	.21	.02	.01	.11	.23
	2	1.199	1.084	.00	.02	.11	.18	.38	.09	.00
	3	1.024	1.173	.02	.17	.04	.41	.01	.11	.16
	4	1.000	1.187	.96	.00	.00	.02	.00	.01	.00
	5	.927	1.233	.01	.70	.00	.06	.01	.27	.00
	6	.807	1.322	.00	.03	.05	.17	.56	.36	.00
	7	.634	1.491	.00	.00	.59	.14	.03	.05	.60

Source: results of the panel data run on SPSS

The Table 6 shows the collinearity diagnostics explains the collinearity between different predictor variables used in the model. All the above values seem to be well within range. The condition index is also less than 30 which shows the absence of multicollinearity. The eigenvalue shows the the model is best with upto 4 variables where its value is more than 1.

FINDINGS

The major findings using the linear regression model is that domestic inflation (WPI) and exchange rate are the two most prominent factors influencing stock prices. There are no significant causal linkage between the stock prices and IIP, PLR (interest rate) while the FISCAL DEFICIT and FII leads the stock price slightly.

CONCLUSIONS

The current study aims to find out the linkage between the real economic variables and the movement of the stock market. The variables have been chosen carefully to suit the Indian context, namely, index of industrial production (proxy for national output), wholesale price index (proxy for inflation rate), SBI prime lending rate (proxy for interest rate), Rs/$ Exchange rate, foreign institutional investment in Indian capital market and fiscal deficit. On the basis monthly data between April, 1994 and March, 2007, the study attempts to test the influence of these variables on the sensitive index of Bombay Stock Exchange by applying multiple regression models using SPSS. What we can infer from the above analysis is that only WPI and EXCHANGE RATE explains the impact to a significant extent. Rest of the variables does not seem to impact the dependent variable to any significant extent. However, the problem lies in choosing the linear model as the impact of macroeconomic variable is better explained by nonlinear model.

The study reconfirms the traditional belief that the real economic variables continue to affect the stock market in the post-reform era in India and also highlights the insignificance of certain variables with respect to stock market. This has an important lesson for the national policy makers, researchers, corporate managers and regulators. However further research can be done in this area using higher models like non linear ones, example artificial neural network which better explains the result between macroeconomic variable and stock price movements.

SCOPE OF FURTHER RESEARCH

The study concentrates on the macroeconomic factors that impact the stock price movements. The study can be further enhanced by studying specific macro factors in detail to understand the dynamics. Also, the model can be enhanced by adding micro factors to give a better model which explains the stock market volatility.

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ROLE OF LAW IN WOMEN EMPOWERMENT

DR. SANGEETA NAGAICH
ASST. PROFESSOR
PUNJABI UNIVERSITY
PATIALA

PREETI SHARMA
SR. LECTURER
CHANDIGARH BUSINESS SCHOOL
MOHALI

ABSTRACT

Women constitute half the population of the society and it is presumed that best creation belong to the women. But it is a harsh reality that women have been ill-treated in every society for ages and India is no exception. From tribal to agricultural to industrial societies to organized states, the division of labour has primarily stemmed from physiological differences between the sexes, leading to the power resting with the men, resulting in the established gender hierarchies. We have been gifted with a history of discrimination; subjugation and suppression. From the cradle to grave, females are under the clutches of numerous evils such as discriminations, oppressions, violence, within the family, at the work places and in the society. In order to ameliorate the condition of women in India, Legislature enacted the large volume of enactments and many of these legislations were enacted in colonial period like: Abolition of Sati Act, 1829; Widow Remarriage Act, 1856; Child Marriage Restraint Act, 1929; Dowry Prohibition Act, 1961; etc. Apart from these laws there are some enactments pertaining to industry or work which contain special provisions for women such as: The Workmen Compensation Act, 1923; Payment of Wages Act, 1936; Factories Act, 1948; Maternity Benefit Act, 1961; Minimum Wages Act, 1948; Employees State Insurance Act 1948 and Pensions Act, 1987; etc. In this paper we are going to put light on such laws those has helped in women empowerment in India.

KEYWORDS

Women, discrimination, women Empowerment, Legislature.

INTRODUCTION

It is a harsh reality that women have been ill-treated in every society for ages and India is no exception. The irony lies in fact that in our country where women are worshipped as Shakti, the atrocities are committed against her in all sections of life. She is being looked down as commodity or as a slave, she is not robbed of her dignity and pride outside her house but she also faces ill-treatment and other atrocities within the four walls of her house. They are considered as an object of male sexual enjoyment and reproduction of children. They are real downtrodden of the society. They are discriminated at two levels, firstly they suffer because of their gender and secondly due to grinding poverty. Women are deprived of economic resources and are dependent on men for their living. Women works are often confined to domestic sphere, she had to do all house hold works, which are not recognized and paid. In modern times many women are coming out to work but has to shoulder the double responsibility; one she has to work where she is employed and secondly she also has to do all the house hold works, moreover, she is last to be considered and first to be fired as she is considered to be less productive than her counterpart. Her general status in the family and in the society has been low and unrecognized. Continuing into the 20th Century, gender imbalances gave rise to Feminist Movements, especially in North America and West Europe. In India, it is believed that women enjoyed an equal status as men in the Vedic Period. The education of women held considerable significance, especially from works of katayana and patanjali. The Upanishads and the Vedas have cited women sages and seers. But the condition declined considerably afterwards. Historical practices such as Sati, Jauhar, Purdah and Devdasis, child marriage, are a few traditions reflective of the gender imbalance in Indian Society. From the cradle to grave, females are under the clutches of numerous evils acts as discriminations, oppressions, violence, within the family, at the work places and in the society.

The root cause of all the evils practices faced by the women is (1) illiteracy, (2) economic dependence, (3) caste restrictions, (4) religious prohibition, (5) lack of leadership qualities and (6) apathetic and callous attitude of males in the society. Law plays an important role in setting norms and standards on acceptable and unacceptable acts on the issue of gender and development. You may wonder – we have had many laws on gender issues. However, gender discrimination has not reduced or been eradicated; neither has gender-based violence. What is the relevance of such laws then? Even if standards set by such laws are not fully implemented, and are frequently violated, law remains significant as a standard whose implementation / enforcement can be demanded – individually and by groups. If the law did not exist in the first place, say, prohibiting domestic violence, how could women assert their right to live with dignity and peace in their homes? Apart from providing justice to aggrieved parties, law seeks to protect weaker, marginalized and vulnerable sections of society, including women, in order to bring about social justice and equality.

STANDARD SET BY THE INDIAN CONSTITUTION

The Indian constitution is a legal, political and moral document. All our basic rights are written in and guaranteed by the constitution. The Indian constitution being the most important law in India sets certain standards with regard to woman rights. These standards and principles were subsequently elaborated through other laws. Some of the important values stated in the constitution include justice (social, economic, and political), liberty (of thought, expression, belief and worship) and equality (of status and opportunity). These values are intrinsically linked to empowerment of women. The Indian constitution contains a chapter on fundamental rights, which is charter of rights that essentially protect an individual's life and liberty from arbitrary acts of the government, state organs and agencies. Similarly, another chapter titled directive principles of state policy (DPSP's) provides guidelines to the state for its governance in accordance with the principles it incorporates, the fundamental rights and DPSP's together from the backbone of protective laws for women. Relevant provisions in the constitution on women's rights include the following:

- The state shall not deny to any person equality before the law or the equal protection of laws (Article 14) ;
- The state shall not discriminate against any citizen on grounds including that of sex[Article 15(1)];
- The state can make affirmative action in favour of women, including through reservation and special laws [Article 15(3)] ;
- The state shall not discriminate, in matters of public employment, on grounds including that of sex [Article 16(1)];
- The state is duty- bound to protect the life and personal liberty of all, including women(Article 21);
- The state is prohibited from trafficking in human beings(Article 23);
- The state is directed to provide equal pay for equal work [Article 39(d)];
- State is directed to make provisions for ensuring just and humane conditions of work and maternity relief (Article 42); and
- A fundamental duty is imposed on every citizen to renounce practices that are derogatory to the dignity of women [Article 51()].

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EMPOWERMENT THROUGH VARIOUS LAWS

The Indian penal code (IPC) is the preliminary law that defines and declares specific acts as crimes, and provides for punishment for the same. Provisions under the IPC related to violence against women are summarized in the table below. In addition to the Indian penal code, criminal laws have also been enacted on specific issues. These include:

(1) The Immoral Traffic (prevention) Act, 1956:

In 1956 suppression of Immoral Traffic in Women and Girls Act known as SITA was passed. The basic objective of this Act was to punish brothel keepers, procurers and pimps and to prevent prostitution in or in vicinity of public places. The Act was amended in 1978 and more recently in 1986 and now titled "the Immoral Traffic (Prevention) Act". The main purport of the Act is to inhibit or abolish commercialized vice; namely, traffic in women and girls for purpose of prostitution as an organized meaning of living.

(2) The Dowry Prohibition Act, 1961:

In 1961, the Government of India passed the Dowry Prohibition Act, making the dowry demands in wedding arrangements illegal. However, many cases of dowry-related domestic violence, suicides and murders have been reported. In the 1980s, numerous such cases were reported.

In 1985, the Dowry Prohibition (maintenance of lists of presents to the bride and bridegroom) rules were framed. According to these rules, a signed list of presents given at the time of the marriage to the bride and the bridegroom should be maintained. The list should contain a brief description of each present, its approximate value, the name of whoever has given the present and his/her relationship to the person

(3) The Indecent Representation of Women Act, 1986:

To prevent indecent representation of women in numerous forms, Parliament passed the Indecent Representation of Women Act, 1986. The object of the Act was to prohibit indecent representation of women through advertisements or in publications, writings, paintings, figures or in any other manner.

(4) Commission of Sati Prevention Act, 1987:

Act was enacted to provide for more effective prevention of the commission of Sati and its glorification and for matters connected herewith or incidental thereto.

(5)The Pre conception and Pre-Natal diagnostic techniques (Prohibition of Sex Selection) Act, 1994:

The Act provides for regulation of the use of pre-natal diagnostic techniques and for the prevention of the misuse of such techniques for the purpose of prenatal sex determination leading to female foeticide.

(6) The protection of Women from Domestic Violence Act 2005:

The objective of the Act is to provide for more effective protection of the rights of women guaranteed under the Constitution who are victims of violence of any kind occurring within the family and for incidental matters.

The Supreme Court has given a number of significant judgments on women's rights in relation to criminal law. In **Vishal Jeet vs. Union of India [(1990)3 SCC 318]**, the court issued directions to all state governments and union territories to prohibit and eradicate child prostitution, devadasi and jogin trade houses, and rehabilitate the victims, in Delhi domestic Working Women's Forum vs. union of India, which involved sexual assault of four domestic workers by seven army officers in a moving train, the supreme court laid down a number of guidelines for increasing the victim's access to legal processes for justice. in **Upendra Baxi vs. State of Uttar Pradesh [(1983) 2 SCC 308]**, the Supreme Court ordered authorities of protective homes to protect the health of women inmates without conflicting with their right to dignity, in **Sheela Barse vs. State of Maharashtra**, the Supreme Court held that female suspects must be kept in a separate lock up in the police station and not kept where male suspects are detained. In **Rekha Kholkar vs. State of Goa**, the Bombay High Court awarded compensation to a woman who was charged with theft and physically assaulted and tortured by both male and female police, and issued directions for interrogation of women suspects. In the case of **Vishakha v State of Rajasthan (AIR 1997 SC 3011)** SC laid down detailed guidelines to prevent the sexual harassment at work places and considered it necessary and expedient for employers at work places or institutions to observe these guidelines.

PROVISIONS UNDER INDIAN PENAL CODE FOR EMPOWERING WOMEN

Category	IPC Section	Act	Punishment
	294	obscene acts and songs	3 months or fine or both
	304 - B	Dowry death	Not less than seven years
Miscarriage	312	causing miscarriage	3 - 7 years
	313	causing miscarriage without consent	10 years or life
	314	death caused while causing miscarriage without woman's consent	10 years or life
	315	act done to prevent child from being born alive or to cause it to be dead after its birth	10 years
	354	assault or criminal force to a woman with intent to outrage her modesty	2 years or fine or both
Kidnapping	363	kidnapping	7 years
	366	kidnapping women to compel marriage, seduction for illicit intercourse etc	10 years
	366A	procuring minor girl under 18 years of age	10 years
	366B	importation of girl	10 years
	372-373	selling and buying minor for purpose of prostitution	10 years and fine
Sexual assault	356	Use of criminal force with intention to outrage modesty of woman	2 years
	375-376	rape and punishment for rape	Not less than seven years
	377	"Unnatural offence ' - carnal intercourse	10 years of life
	376 read with 511	Attempt to rape	
	506	word, gesture or act intended to insult the modesty of a woman	1 years or fine or both
Offences within marriage	493	cohabitation caused by deceitfully inducing woman under belief of law full marriage	10 years
	494	Bigamy- marring again during life time of husband or wife	seven years and fine
	496	Going through unlawful marriage ceremony	7 years
	497	adultery	five years or fine or both
	498	Enticing , detaining a woman with a criminal intention	2 years
Cruelty to women	304B	Dowry death	7 years or life
	306	abetment to suicide	10 years and fine
	498-A	husband or relative of husband of a women subjecting her to cruelty	three years and fine

EMPOWERMENT THROUGH LABOUR LAWS

Labour laws aim at protecting and promoting workers "rights at the work place. Provisions of labour laws on women rights have focused on improving the safety, health and welfare of women in factories and other places of work, minimum wages, equal pay for equal work, maternity benefits, child care facilities,

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provisions for adequate rest and leisure, prevention of discrimination and sexual harassment at the work place. Labour laws that protect women at the work place include:

- **The Equal Remuneration Act, 1976** – Provides for equal remuneration to men and women workers for same work or similar work, and prohibits discrimination is permissible in recruitment and service conditions expect where employment of women is prohibited and restricted by law.
- **Maternity Benefits Act, 1961** – Provides for maternity leave and benefit in order to protect the dignity of motherhood and gender justice.
- **The Factories Act, 1948** – The act has many provisions protecting women at workplace, including issues pertaining to occupational safety, provision of sanitation and crèche facilities.
- **The Mines Act, 1952** – It prohibits the employment of women underground and provides for restricted timings of work for women employed above the ground

Other laws pertaining to rights of workers, which benefit women-, these include Minimum Wages Act 1948, bonded labour system (Abolition) Act 1976, Plantation Labour Act 1951, Payment of Wages Act 1936, Industrial Employment (Standing Orders) Act 1946, Workmen's Compensation Act 1923, Employees State Insurance Act 1948 and The Contract Labour (Prohibition and Regulation) Act 1970.

EMPOWERMENT THROUGH PROPERTY RIGHTS

In most Indian families, women do not own any property in their own names, and do not get a share of parental property. Due to weak enforcement of laws protecting them, women continue to have little access to land and property. In fact, some of the laws discriminate against women, when it comes to land and property rights.

The Hindu personal laws of mid-1956s (applied to Hindus, Buddhists, Sikhs and Jains) gave women rights to inheritance. However, the sons had an independent share in the ancestral property, while the daughters' shares were based on the share received by their father. Hence, a father could effectively disinherit a daughter by renouncing his share of the ancestral property, but the son will continue to have a share in his own right. Additionally, married daughters, even those facing marital harassment, had no residential rights in the ancestral home. After amendment of Hindu laws in 2005, now women in have been provided the same status as that of men.

EMPOWERMENT THROUGH MATRIMONIAL LAWS

Matrimonial laws consist of a set of laws that govern family relationships and rights of spouses and children during and subsequent to marriage. It covers aspects such as entering into marriage, divorce, maintenance, custody, succession, inheritance, guardianship and adoption. Different matrimonial laws govern members of different religious communities, with the exception of Special Marriage Act, which is a law common to all religious communities. Matrimonial laws in India today are a curious mixture of laws drawn from religious texts, interpretation of those texts, customs, traditions and principles derived from British Law. Almost all the laws are patriarchal in nature and have discriminatory provisions against women, prescribing an inferior status to women in family and society; and attempting to control women sexuality in subtle ways. Implementation of matrimonial laws is through Family courts in cities where these have been set up, or by District courts in the absence of Family Courts. In a landmark judgment of the Supreme Court it was stated that a demand of dowry amounted to cruelty, entitling the women to divorce. In other landmark judgement, on aspects of Muslim matrimonial law, the Kerala High court stated that failure of husband to maintain his wife entitles her to divorce. In a case where the husband claim that he ceased to be impotent, sought the court's order to compel his wife to submit herself to him for this purpose, the court refused to do so and protected the women's dignity .In a case where the man breached his promise to marry the women, the court said that she was entitled to claim damages. In another case where a Non-resident Indian {NRI} husband deserted his Indian wife, the Supreme Court made suggestions for safeguarding the interests of woman in such situation. It was explained by the court in one case that under the Hindu Marriage Act, the amount of maintenance fixed for the wife should be such that she can live with reasonable comfort considering her status and the mode of life she used to when she lived with her husband. In a case where the Family Court refused custody of minor child to the mother on grounds including that she was a working woman and has to remain away from the house during duty hours, the Bombay High Court, on appeal, awarded the mother custody of the child, stating that there was no disqualification in the mother, who was more educated than the father, and independent. In Gita Hariharan vs. Reserve Bank of India, the Supreme Court stated that under the Hindu Minority and Guardianship Act 1956, the mother could act as the natural guardian of the minor during the father's lifetime if the father was not in charge of the affairs of the minor.

SUMMING UP

Law is like a double-edged sword. On one hand it is tool for empowerment of woman and other marginalized communities. It is up to each individual to make use of empowering lows to assert their rights. Information about such laws is a first step towards assertion of rights through law. The crucial question that arises for deliberation is: Have the women been able to reap the benefits provided for them under the Constitution of India and all the laws which have been made for the empowerment of women? The answer, unfortunately, is not encouraging. There is still a long way to go to achieve the goals enshrined in the Constitution and all other laws. In spite of special constitutional guarantees and other legislations, crimes against women in the form of child marriages, rape, and dowry, practice of Sati, trafficking of the girl child, prostitution, domestic violence and sexual harassment are on the increase. The review of the disabilities and constraints on women, which stem from socio-cultural institutions, indicates that the majority of women are still very far from enjoying the rights and opportunities guaranteed to them by the Constitution. Justice K. Ramaswamy has also stated: "Indian women have suffered and are suffering discrimination in silence. Self-sacrifice and self-denial are their nobility and fortitude and yet they have been subjected to all inequities, indignities, inequality and discrimination."

It is realized that despite the constitutional safeguard and the active judicial support towards the cause of women, changes in social attitudes and institutions cannot be brought about very rapidly. However, it is necessary to accelerate this process of change by deliberate and planned efforts so that the pernicious social evil of gender inequality is buried deep in its grave. Laws written in black and white are not enough to combat the evil. Awakening of the collective consciousness is the need of the day. A problem as multifaceted as women's self-actualization is too important to be left to a single section of the society. This responsibility has to be shared by the State, community organizations, legislators who frame the laws and the judiciary which interprets the Constitution and other laws in order to give a fillip to the legal reform in the field of gender justice and to usher in the new dawn of freedom, dignity and opportunity for both the sexes equally.

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WORK LIFE BALANCE FOR BANKING EMPLOYEES: A COMPARATIVE STUDY

DR. DIVYA NEGI
ASST. PROFESSOR
DEPARTMENT OF MANAGEMENT STUDIES
GRAPHIC ERA UNIVERSITY
DEHRADUN

SEEMA SINGH
RESEARCH SCHOLAR
DEPARTMENT OF MANAGEMENT STUDIES
GRAPHIC ERA UNIVERSITY
DEHRADUN

ABSTRACT

Work life and personal life are two sides of the same coin. Creating and managing a balance between the work and personal life is considered to be a work life balance issue. Increasing work pressures, globalization and technological advancement have made it an issue with both the sexes, all professionals, working across all levels and all industries throughout the world. The corporate world today is exceedingly demanding. The banking industry is one which is facing the brunt of the hazard of work- life imbalance. Work deadlines are getting tighter and the individual's jobs are not only to match with deadlines but also to give quality outputs. Due to this work pressure, it becomes exceedingly difficult to maintain work – family life. Many a times, people, in the quest for reaching the top, work so hard, that they miss out on the real pleasures of life. While it is absolutely great to have a flourishing career, it is equally imperative to have a life outside work. Work-personal life conflict occurs when the burden, obligations and responsibilities of work and family roles become incompatible. Obligation of one can force an individual to neglect the other. This study is a specific study of private and public sector banks of Dehradun district. The study endeavors to explore the challenges associated with managing professional and personal life of employees of banking sector. It also tries to find causes and consequences of imbalance on the basis of gender, demographics, level of hierarchy at organizational level, welfare policies, growth pattern, family and societal commitments. The study concluded that work life balance has become a quest for professionals of banking industries and also that employees work better when they do make time for family and personal interests.

KEYWORDS
banking industry, gender issues stress, work pressures, work-life balance.

INTRODUCTION

The expression "work-life balance" was first used in the late 1970s to describe the balance between an individual's work and personal life .Work life and personal life are the two sides of the same coin. Traditionally creating and managing a balance between the work-life was considered to be a woman's issue. But increasing work pressures, globalization and technological advancement have made it an issue with both the sexes, all professionals working across all levels and all industries throughout the world. The technological developments like e-mail, text messaging and cell phones which were thought of as tools to connect them to their work being away from their workplace, have actually integrated their personal and professional lives. Now professionals find themselves working even when they are on vacations.

Work life and personal life are inter-connected and interdependent. Spending more time in office, dealing with clients and the pressures of job can interfere and affect the personal life, sometimes making it impossible to even complete the household chores. On the other hand, personal life can also be demanding if you have a kid or aging parents, financial problems or even problems in the life of a dear relative. It can lead to absenteeism from work, creating stress and lack of concentration at work.

Many a times, successful people, in the quest for reaching the top, work so hard, that they miss out on the real pleasures of life. While it is absolutely great to have a flourishing career, it is equally imperative to have a life outside work. Work-personal life conflict occurs when the burden, obligations and responsibilities of work and family roles become incompatible. Obligation of one can force an individual to neglect the other.

The ever-increasing working hours leave the individuals with less time for themselves and to pursue his hobbies or leisure activities. This hinders the growth of the person as an individual in terms of his personal and spiritual growth. Professionals working in the multi-national corporate such as BPO industry, doctors and nurses IT, banking industry professionals are the few examples who are facing the brunt of the hazard constantly.

A decade back, employees used to have fixed working hours. The boundary between the work and home has disappeared with time. With globalization people working across countries are realizing that the concept of fixed working hours is fading away. The technological blessings like e-mail, text messaging and cell phones which were thought of as tools to connect them to their work being away from their workplace, have actually integrated their personal and professional lives. Now professionals find themselves working even when they are on vacations. The ever-increasing working hours leave the individuals with less time for themselves and to pursue his hobbies or leisure activities. This hinders the growth of the person as an individual in terms of his personal and spiritual growth. Professionals working in the banking industry are facing the brunt of the hazard constantly.

There are a number of highly contentious issues associated with flexible working. For example, government policy may favour a reduction in the legal restrictions on the hiring and dismissal of workers, which would most certainly increase flexibility. However, this could have significant, often harmful, consequences for many groups and individuals. This is a key issue for many developing and advanced economies. Many countries have a legally enforceable minimum wage, but the consequences may be higher unemployment levels among Low-skilled, particularly young, people. In many countries governments are considering age discrimination legislation, in particular to prevent discrimination in the employment of older people. Although it is recognized that government has a role to play, the impact of often unintentional consequences of government intervention, can be damaging. Getting it 'right' is rarely straightforward. It is evident that this real or perceived need for flexibility is increasingly influencing employment conditions. Within organisations, people are both the most vital and the most costly resource. Traditionally, however, people have often been seen, rightly or wrongly, as being prone to inflexibility and inertia. As a consequence many organisations have sought to achieve greater flexibility in employment conditions in recent decades. Both employers and employees lead the trend, with governments often regulating, sometimes supporting, and developments via legislation. That said, 'flexibility' often means different things to individuals as opposed to business.

The corporate world of today is exceedingly demanding. Today the deadlines are getting tighter and an individual's job is not only to match that deadline but also to give quality output. Due to this work pressure, it becomes exceedingly difficult to maintain a family life. It becomes very difficult to have the engagement of mind with the engagement of body. In every individual's life there are four stakeholders- own personality, job, family and society.

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Thus, it is assumed that work-life balance can bring a huge transformation at the organizational and individual levels. It helps an organization to inherently build a strong value system, which is attributed to the work life balance. This will help people realize what they want to do, which in turn will lead to stronger organizations based on stronger values, orientations and ethics.

There is no 'one size fits all' pattern of work-life balance practices. It is important for employers to offer practices that appeal to all employees. Employers may incur additional costs in adopting policies to support work-life balance, including increased managerial workloads. Such costs are however generally outweighed by the gains in achieving strategic objectives:

- increased flexibility and customer service, for example to cover for absence and holidays
- raised morale, motivation, commitment and engagement
- reduced absenteeism
- improved recruitment and retention of a diverse workforce
- wanting to become an 'employer of choice'
- Meeting legal requirements.

REVIEW OF LITERATURE

Work life balance brings greater effectiveness to all aspects of life. Employees work better when they do make time for family and personal interests. Thus the issue has become pertinent not only in India but has become major issue of concern for all kinds of industry worldwide. Lot of work has been done researchers in order to explore the ways to maintain the proportionate balance between work and life. Some of the research reviews are as follows-

Brent C Miller (2004) in his research "Influences of the Virtual office aspects on work and work/life balance" found that millions of employees now use portable electronic tools to do their jobs from a "virtual office" with extensive flexibility in the timing and location of work. This study highlights the need for a multi-method approach, including both qualitative and quantitative elements, when studying telework.

Jane Sturges (2004) in her research on "Working to live or living to work? Work/life balance early in the career" reports the findings of research that explored relationships between work/life balance, work/non-work conflict, hours worked and organisational commitment among a sample of graduates in the early years of their career. It concludes that, although graduates seek work/life balance, their concern for career success draws them into a situation where they work increasingly long hours and experience an increasingly unsatisfactory relationship between home and work.

Arunima Ghosh (2006) in research on "The Relationship between the Involvement of Work Innovations and Work-Family Balance" explored the relationships between the involvement of work innovation and work-family balance concepts (work-family conflict and work-family facilitation). This study revealed that the involvement of "JIT (just-in-time) system" and "six sigma" were positively associated with work-family conflict. Three management innovation activities, "total quality management (TQM)", "work team", and "pay-for-performance system" were negatively associated with work-family conflict. "work team" had positive relationship with work-family facilitation.

Alan Felstead (2007) in his research on "Opportunities to work at home in the context of work-life balance" finds 'work-life balance' and 'family-friendly' employment is much in vogue among politicians and business leaders. The article shows that the option to work at home is more likely to be available in the public sector, large establishments and work environments in which individuals are responsible for the quality of their own output. These workplaces are typically less unionized but not especially feminized.

M Rajgopal (2007) in his research on "work to live, don't live to work: A cross-sectional study of the work-life balance of higher managers" finds that work-life balance is currently in vogue among governments, organizations as well as researchers. Managers in organizations all over the world are exposed to significant pressures in their jobs, which further influence the balance between their work and private lives, job satisfaction and overall well-being. The key findings in terms of the factors influencing higher managers are reported. They suggest that the individuals are influenced by several aspects. The responsibility for personal work-life balance does not only lie on individuals themselves, but the organizations and governments play an important role in treating this issue as well.

Neelima Desai C(2007) in her research on "continuity and change in work–life balance choices" explores the ways in which the work–life balance choices made by heterosexual couples differ in different generations, how such choices are gendered, and the extent to which 'individualization' provides an adequate conceptualization of the effects of social change on heterosexual couples. Their findings support the contention that processes of individualization are more apparent amongst younger than older generations and that, because of changes external to the family, there is more negotiation and pragmatism amongst younger generations about work–life choices.

Farnaz Namin-Hedayati (2007) in his research on "An exploration of the effects of emotional intelligence on work-life balance, above and beyond personality components in working, graduate and undergraduate students" explored the relationship between emotional intelligence and work-life balance while holding the effect of personality constant. The relationships among work-life balance (as indicated by work-family and family-work conflict) Personality and emotional intelligence were measured in 100 working undergraduate and graduate students. Results indicated that total emotional intelligence explained significant levels of the variance of both work-family conflict and family-work conflict, even in the presence of personality. However, the individual emotional intelligence dimensions, managing own emotions) explained significant variances of family-work conflict only.

Jennings Karlene Noel (2007) in her research on "In the balance: Work/life balance of senior development professionals within higher education" finds that Work/life balance has become a goal or quest for professionals of many disciplines. To achieve this often precarious and sought after stability has been studied through various lenses and perspectives. This dissertation utilizes a qualitative methodological framework to study the work/life balance of six senior advancement professionals at Research Extensive public higher education institutions.

Mastri Annalisa Igina (2007), in his research on "The effect of work/life balance policies on employee retention and profitability" finds that women in the United States are disproportionately underrepresented at the upper levels of law, medicine, and business. Some have suggested that combining high-powered careers with family demands is exceedingly difficult, causing women to quit work altogether or remain at the lower levels of professional work.

Johnson Roxanna (2008) in his research on "An analysis of equity perception related to family-friendly work-life balance of female employees without dependents" finds companies have initiated family-friendly work-life balance programs to improve retention, recruitment, job satisfaction, and productivity, and to reduce absenteeism and stress of employees with dependents. Results of this study suggest that developing work-life balance programs that are more equitable for all employees will increase perceptions of organization justice, thereby increasing perceptions of value to the organization for employees without dependents. Industrial/Organizational psychologists who work for, or with, organizations and others in leadership positions may want to more closely attend to the equity of work-life balance programs. Ideas are provided based on suggestions participants gave for making work-life balance programs more equal for all employees.

Vijay Laxmi (2008) in her research on "working spouses fine with their work life balance" explores getting married is no more a reason for dissatisfaction in the work life. Married working couples in India appear to manage the work-life tightrope well. The continued difficulties for women looking to re-enter the workforce after a child break and the high unwillingness to move cities to follow their spouses' careers are the challenges for women spouses in the Indian workplace. There is evidence that such programs are not a significant drain on company profitability. Since firms similar to those in this study can expect to realize gains in retention of employees and continued profit growth, it would benefit them to adopt certain types of work/life balance policies.

IMPORTANCE OF THE STUDY

Work-Life Balance is more than just a buzzword – it's for real. Employers who have responded to the changing social and business environment and built Work-Life Balance policies into their culture have benefited tremendously. In the India, fairly rapid strides have been made in introducing Work-Life Balance policies. Industry initiatives have been supported by Government legislation, trade union debate and industry association advocacy to ensure that Work-Life Balance

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policies are more pervasive and effective. However, there are still some fundamental issues that need to be addressed or myths that need to be shattered by both employee and employer.

OBJECTIVES OF THE STUDY

•   The study aims at finding challenges associated with managing professional life of the employees of the Banking sector.
•   The study also aims at evaluating causes and consequences leading to Work-life imbalance on the basis of gender, demographic structures, and level of hierarchy at organizational level, growth pattern, welfare policies, Family and societal commitments.
•   The study aims at developing and recommending strategies to integrate work into over all life issues effectively which may prove to be of some help to Banking Industry and its employees.

RESEARCH METHODOLOGY

AREA UNDER STUDY
The sample was taken from private and public sector banks of Dehradun city, which includes State Bank of India, Punjab National Bank and Allahabad bank among Public Sector banks and HDFC Bank, ICICI Bank, and AXIS Bank among Private Sector banks.

DATA COLLECTION TOOLS

A.   Primary Data
A set of questionnaire was developed to collect the responses from the employees of the banking sector to perceptualize the opportunities, scope and constraints and grey areas with regard to comparative study of employees of private and public sector banks of Dehradun city. Information on geographic, socio-cultural and psychological perspectives of the study area has been collected for preparing this questionnaire.
The major dimensions which have been used to measure Work Life Balance (WLB) are namely- gender bias, demographic structures of families of employees, level of hierarchy in the organisation, welfare policies of the organisation and family and societal commitments of the employees.

B. Secondary Data
For requisite details on planning and   policies of government and other geographical and socio-cultural perspective of the study area was collected from authentic resources such as books and journals, research papers, Project readings, unpublished reports of government departments and other reliable sources of information broadcast.

SAMPLING TECHNIQUE
The Stratified Random Sampling Technique has been used in order to collect the primary data.

SAMPLE SIZE
200 samples have been taken both from private sector and public sector banks of Dehradun city .Sample comprises of supervisory and subordinate staff of public sector banks and managerial and executive staff of private sector banks. Samples has been taken from the public and private sector banks with the specific study of State Bank of India, Punjab National Bank, Allahabad Bank among public sector banks and HDFC bank, ICICI Bank, and AXIS Bank among private sector banks.

RESULTS & DISCUSSION
The qualitative and quantitative analysis of work-Life balance of employees in banking sector was done on the basis of interpretation derived out of the specially framed questionnaire with the help of tabulation of data. Major findings of the study have been summarized in Table 1 below.
The study polled 200 banking employees from the private and the public sector banks located in Dehradun city which included State Bank of India, Punjab National bank, Allahabad Bank from the public sector and HDFC bank, ICICI bank, AXIS bank amongst the private sector banks.

TABLE 1: FINDINGS OF THE STUDY (figures are in percentage)

Statements	Public		Private	
	Yes	No	Yes	No
I feel happy at my work place.	43	57	61	39
My organisation has time off facility for family engagements	29	71	42	58
Women employees feel that they can't pursue their career with same velocity after marriage and child break	89	11	91	9
Married and working couples appear to manage work life better	46	54	58	42
Working in odd shifts/after work hours influences marital relationships	69	31	73	27
After child break women employees find it difficult to join the workforce and maintain work life balance	82	48	84	16
Men equally share household and child rearing responsibilities	37	63	47	53
My organisation has parenting, family as well as child care programmes to help balance my work life	64	36	62	38
I feel I earn enough to take care of my spouse and children	56	44	63	37
I feel stressed out most of the time because of my work pressure	68	32	71	29
I almost always feel the element of gender bias in my work as well as my family life	69	31	64	36
I'm satisfied with the amount of time I spend with my family	67	33	48	52
I feel increase in hierarchy level of an individual does have positive impact over WLB	49	51	53	47
Increase in age and societal commitments may have hindrance in maintaining one's WLB	76	24	77	23
Careers in banking are compatible with WLB	58	42	52	48

Only 43 % people in the public sector banks accepted that they do not feel happy in their work place while 61 % private sector employees responded favourably accepting that they feel happy at their work place.
About 71 % public sector employees were dissatisfied with the policies/facilities regarding time off for family engagements where as the private sector bank employees also followed the same trend with 58 % of their employees. Majority of the employees with 89 % amongst the public sector and 91 % of amongst the private sector realized that women employees cannot pursue their career with same velocity after marriage and child break.
Mixed kind of responses drawn from the employees revealed that married and working couples appear to manage work life better. Amongst public sector about 46 % of the employees polled in favour whereas amongst the private sector 58 % polled in favour. Working in odd shifts /after work hours influences marital relationships was accepted by 69 % employees in the public sector while it was leading with 73 % in the private sector banks.
The study reveals that as high as 82 %of the employees in public sector and 84 % in private sector found it difficult to maintain work life balance after a child break. Hardly 37 % of the employees amongst the public sector & 47% amongst the private sector could agree on that men equally share households and child rearing responsibilities.However the employees around 64 % from public sector and 62 % of from private sector had agreement on that their organization exercised parenting-family as well as child care programmes to help balance the their work-life.
Approximately 56 % of public sector employees and 63 % employees of private sector feel that they can earn enough to take care of their spouse and children. However is alarming that approx 68 % of the public sector and 71 % of the private sector felt themselves stressed out most of the time because of their work related pressure.

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Despite of liberalisation and globalization in the Indian banking industry the element of gender bias has been felt by almost 69 % in the public sector and 64 % in privates sector. There has been greater satisfaction amongst the public sector banks leading with 67 % with regard to the amount of the time they were able to spend with their families as compared to employees in the private sector with just 52%.

Approximately 49 % amongst public sector feel that increase in hierarchy level of an individual does have important act of over work-life balance while 53% of amongst the private also feels so. Increase in age and societal commitments may have hindrance in maintaining once work-life balance was accepted by a majority of 76 % amongst public sector and 77 % amongst the private sector. Approximately 38 % of employees in the public sector and approximately 52 % of employees amongst private sector feels that careers in banking are compatible with work-life balance .

SUGGESTIONS AND RECOMMENDATIONS
•   The following suggestions can be given to the executives to manage the work life balance:
•   Time management is one of the best solutions which can help to reduce the imbalance between the personal and the work life of the employees.
•   Prioritizing the tasks and planning the activities can help to take out some free time which can be utilized for other purposes.
•   Taking some time out for hobbies and leisure activities, spending time with loved ones can help to beat the stress.
•   Learn to say "no" if required.
•   Sharing the responsibilities will help to maintain work life balance
•   Don't commit for something which is practically impossible in order to avoid the stress.
•   Utilizing the 'flexible working hours' option of the organizations to get some free time.

CONCLUSION
Juggling between the obligations towards the families and expectations of the organization and constant struggle to maintain a balance of work can have serious implications on the life of an individual. Work and personal life conflict occurs when the burden, obligations and responsibilities of work and family roles become incompatible Therefore, it is important for employees to maintain a healthy balance between work and their private lives. This will help them achieve their personal and professional goals as well the organization they are working for. The study concluded that the work life balance has become a quest for professionals of banking industry both in private and public sector of Dehradun city and also that employee's work better when they do make time for family and personal interests.

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SAVINGS AND INVESTMENT PATTERN OF SCHOOL TEACHERS -A STUDY WITH REFERENCE TO UDAIPUR DISTRICT, RAJASTHAN

DR. DHIRAJ JAIN
ASST. PROFESSOR
PACIFIC INSTITUTE OF MANAGEMENT
UDAIPUR

PARUL JAIN
STUDENT
PACIFIC INSTITUTE OF MANAGEMENT
UDAIPUR

ABSTRACT

The research study was based on the micro economic approach of estimating the responses of the respondents i.e. school teachers towards the savings and investment pattern in the city of lakes i.e. Udaipur district .The aim of the study was to determine the relationship between the savings and investments literacy among the school teachers. The study was done on the different government and private school teachers. The data was collected by distributing a structured questionnaire to 100 school teachers in different schools of Udaipur district. In spite of low income the teachers have been saving for future needs. The major impact on savings is due to the level of income of the school teachers. The research shows that majority of the respondents are saving money as Bank deposits for the safety of an unpredictable future. The main avenues of investment are Bank deposits and the main purpose of investment is for children education, marriage, and security after retirement.

KEYWORDS

Annual income, Annual savings, Investment, School teachers, , Rate of return.

INTRODUCTION

As circulation of blood is necessary for the survival of the individual in the same way savings are also necessary for unpredictable future in order to meet the emergencies in life. Savings means sacrificing the current consumption in order to increase the living standard and fulfilling the daily requirements in future. The saving can be done in different ways by making bank deposits, increase in cash reserve. One of the best ways of saving is to create an automatic saving plan. Savings plays very important role in making of the household and the national economy. Savings provides the financial protection to the individual saver at the time of emergency. It is necessary to have saving plan because it will help in meeting financial goals like secure future, children education, meeting the demands of the family etc.

In order to attract the individual for savings a part of their income, various efforts had been made by the government and various financial institutions like different saving plans with attractive high rate of interest. Apart from the above initiative there are various reasons for saving which could be as follows:

Emergencies in future:-The funds are necessary in order to meet the consequences in future like sudden accident, reparing of car, house construction, etc.

Secure future: - After retirement, savings are a source of funds with which the individuals could continue a decent and reasonable lifestyle when all the income streams stops.

Sudden death:-How can loved ones cope up with the financial problems that may result from the sudden death of any of the family members? Savings helps in coping up in these type of situation.

Specific purpose or goal / satisfaction: - This might be reason for savings like for e.g.:- for financing the children education, for the down payment for car or house or for a holiday.

Economic development: - Savings play a very important role in building up of the national economy. Through savings, the national income increases that leads to the development of the economy.

Investment: - Investment is an economic activity of employment of funds with the expectation of receiving a stream of benefits in future. Investment is mainly done with the objective like wanting a home, creating regular income after retirement, and possessing money for the children education.

REVIEW OF LITERATURE

Richard A. Duschl, Emmett Wright (1989) investigated the manner and the degree to which science teachers considered the nature of the subject matter in their decision making addressing the planning and the delivery of instructional tasks. The goal of the study was the development of grounded hypotheses about science teacher's pedagogical decision making. **Roland P. Chaplain (1995) s**tudied the sources of stress and job satisfaction amongst a sample of 267 teachers, drawn from primary schools in the North and Eastern regions of England. Teachers scored a frequency and intensity of 18 items on a stress scale and strong correlations were found between professional concerns and occupational stress.. Men reported more stress than women on professional tasks and pupil behavior and attitude. Women scored higher than men on professional concerns. Just over one-third of teachers were satisfied with their job. When specific facets of job satisfaction were examined, teachers were most satisfied with their professional performance and least satisfied with teaching resources. Stress and job satisfaction were found to be negatively correlated. High reports of occupational stress were related to low levels of job satisfaction. Attention is drawn to the likely significance of including a frequency as well as intensity measure when considering the experience of stress and to the complex nature of job satisfaction. **Margaret C. Lohman (2000)** *examined* the environmental inhibitors to informal learning in the workplace. Twenty-two experienced teachers were interviewed and numerous site visits were made to each school where these teachers worked to develop a greater understanding of the ways in which aspects of their work environment inhibited them from engaging in informal learning. Four environmental inhibitors emerged from the study of lack of time for learning, lack of proximity to learning resources, lack of meaningful rewards for learning, and limited decision-making power in school management. Implications of these findings for theory, research, and the facilitation of informal learning in the workplace were discussed. **Mike Summers, Colin Kruger, Ann Childs and Jenny Mant (2000)** used in-depth interviews to explore the understanding of a non-random sample of 12 practicing primary school teachers in four areas: biodiversity, the carbon cycle, ozone and global warming. A methodological innovation in this research was the prior identification of basic scientific explanations of each area for a primary teacher, and the use of these as benchmarks for judging understanding. The study was able to identify those underpinning science concepts which were well understood, and those which were not so well understood. Some missing concepts and misconceptions were also reported. Though the findings cannot be generalized to all primary teachers, the fairly strong science backgrounds of eight teachers in the sample suggested that some of the difficulties reported would be found more widely. It was suggested that both the basic explanations and the difficulties of understanding displayed by the teachers can usefully inform programes of professional development for environmental education. An outline of a guide for teacher education adopting this approach was provided.**Josephine M. Shireen Desouza, William J. Boone, Ozgul Yilmaz (2004)** found that the instrument worked well for the two groups of teachers, but the differential item functioning analysis found that the teachers utilized several items in the scale differently. Parametric tests

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suggested that self-efficacy and outcome expectancy measures correlated highly for middle school teachers, for those that did not have a science degree and a written science curriculum. From all of the analyses it was concluded that teaching experience was important, but not necessarily enough to increase teachers' outcome expectancy beliefs. The results of the study benefited educators and policy makers with respect to teacher education in India and around the world. **Jos Mooij (2005) s**tudied that since the early 1990s, significant progress was made with regard to education in India. This positive development stands, however, in sharp contrast with the way in which government teachers themselves think and talk about education. Instead of feeling pride and satisfaction, many teachers were unhappy, and often self-critical. Based on focused group discussions and interviews with teachers in Andhra Pradesh, south India, the study analyses the reasons behind motivations and demotivations of government schoolteachers and concludes that there was a need for a new professional ethos and culture. **R. Goymda & Y. Josephine (2005)** provided an overview of 'para' teachers in India. It traced its origins of para-teacher schemes in the country and analyses the changing policy context where-in poorly paid and trained para-teachers on contract were increasingly being recruited in place of regular teachers in government schools. Drawing upon available research studies, the authors drew attention to the detrimental implications that para-teacher programmes had for professionalisation of teachers, the quality of schooling and equity concerns in education. **Michael Kremer, Nazmul Chaudhury, F. Halsey Rogers, Karthik Muralidharan, Jeffrey Hammer (2005)** found that twenty-five percent of teachers were absent from school, and only about half were teaching, during unannounced visits to a nationally representative sample of government primary schools in India. The researchers found little evidence that attempting to strengthen local community ties reduced absence. Teachers from the local area had similar absence rates as teachers from outside the community. Locally controlled non-formal schools have slightly higher absence rates than schools run by the state government. The existence of a PTA was not correlated with lower absence. Private-school teachers were only slightly less likely to be absent than public-school teachers in general, but were 8 percentage points less likely to be absent than public-school teachers in the same village. **Chaudhury, Nazmul; Hammer, Jeffrey; Kremer, Michael; Muralidharan, Karthik; Rogers, F. Halsey (2006)** focused on whether providers were present in their facilities, but since many providers who were at their facilities were not working, even these figures were present too favorable a picture. For example, in India, one-quarter of government primary school teachers were absent from school, but only about one-half of the teachers were actually teaching when enumerators arrived at the schools. **Archna v. Hegde, Deborah j. Cassidy (2009)** interviewed **t**welve kindergarten teachers in their study, and a constant comparative method was used to analyze the interviews. This study included a focus on academics vs. play, the importance of worksheets, the importance of groups for socialization, and the difficulties of implementing a play-based curriculum.

STATEMENT OF THE PROBLEM
The people save the money in order to meet the financial requirement in future because future is unpredictable. So savings are required in order to meet the financial requirements. There is a vast scope of savings and investment because of the presence of a large number of small industrialists, businessman, and government employees in Udaipur and the circulation of money is also high. This study has been done to analyze the savings and investments pattern of school teachers of Udaipur district, Rajasthan.

PROFILE OF THE STUDY AREA
Udaipur is district of Rajasthan state in Western India. Udaipur is well known name famous for its lakes, palaces, architecture, temples, natural beauty, Ecotrails romantic evenings and its golden history. But it is a place lot more famous for its beauty but also as place endowed with natural minerals.

SCOPE OF THE STUDY
The research study covers the school teachers working in government and private school in **Udaipur** district of Rajasthan on their different patterns of savings and investments.

OBJECTIVES OF RESEARCH STUDY
- To evaluate the saving habits of school teachers.
- To analyze the investment pattern of school teachers.
- To analyze the rate of return the school teachers expect for their investment in Udaipur, district.

HYPOTHESIS FRAMED FOR THE STUDY
H_{01} : There is no significant relationship between the annual income and the annual savings of the respondents
H_{02} : There is no significant relationship between gender , marital status and annual savings with the expected rate of return of the respondents
H_{03} : There is no significant relationship between the yearly income of the respondents and the expected rate of return on investments

METHODOLOGY
The research study is based on primary data which has been collected by conducting a survey among 100 samples of school teachers of Udaipur district.

SAMPLING DESIGN
For the purpose of research 10 government and 10 private schools of Udaipur city were randomly selected. Convenient sampling method was adopted.

CONSTRUCTION OF TOOLS AND PRETEST
For the purpose of research study, a pilot testing was conducted among 5 school teachers to analyze the effectiveness of the questionnaire. The questionnaire was modified on the basis of the pilot testing and data was collected from 100 school teachers. After the completion of survey, the data was analyzed, edited and coded. To analyze the data, the researcher used various techniques like percentage analysis, weighted average, chi-square, t-test and correlation analysis, F-test.

SOCIO- ECONOMIC STATUS OF THE RESPONDENTS
The socio – economic status of the respondents influences the investment habits of the people. Therefore the researcher analyses the socio- economic status of the respondents.

Table 1 shows the economic status of the respondents. It is clear from Table 1 that of the 100 respondents, 35 % respondents were male 2 % belonged to the age below 25 years, 29 % in the age group of above 45 years, 37 % in the age group of 35-45 years and 32 % in the age group of 25-35 years. Those who were under graduate with and without B.Ed were 4 % and 7 %and postgraduate with and without B.Ed were 51 % and 20 %. Others were 18 percent . Nearly 70 % of the respondents were Post graduates. 5 % of the respondents were first grade teachers, 19 % with second grade, 42 % with third grade, 34 % were with other grade teachers. 10 % of teachers were single, 87 % were married, 1% divorced and 2 % of the respondents were widow. This was because the 98 percentage of the respondents were above 25 years of the age group. 8 % of the respondents had an annual income of less than Rs 1, 00,000. Respondents who were having an annual income of Rs.1, 00,000-Rs.2, 00,000 and Rs.2, 00,000-Rs.3, 00,000 were 33 % and 45 % respectively. Respondents whose income was above Rs.3, 00,000 amounted 14 %. Majority of the respondents (45%) were having an annual income Rs2, 00,000- 3, 00,000.

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TABLE 1 : SOCIO ECONOMIC STATUS OF THE RESPONDENTS

S. No.	Status	Number of respondents	Percentage
Gender			
1	Male	35	35
2	Female	65	65
	Total	**100**	**100**
Age			
1	< 25 Years	2	2
2	25-35 Years	32	32
3	35-45 Years	37	37
4	>45 Years	29	29
	Total	**100**	**100**
Qualification			
1	UG with B.Ed	4	4
2	UG without B.Ed	7	7
3	PG with B.Ed	51	51
4	PG without B.Ed	20	20
5	Others	18	18
	Total	**100**	**100**
Designation			
1	First Grade	5	5
2	Second Grade	19	19
3	Third Grade	42	42
4	Others	34	34
	Total	**100**	**100**
Marital Status			
1	Single	10	10
2	Married	87	87
3	Divorced	1	1
4	Widow	2	2
	Total	**100**	**100**
Annual income			
1	< Rs 1,00,000	8	8
2	Rs 1,00,000 - Rs 2,00,000	33	33
3	Rs 2,00,000 - Rs 3,00,000	45	45
4	> Rs 3,00,000	14	14
	Total	**100**	**100**

Source: Primary data

CATEGORY OF SCHOOL

There are two categories of schools, in which the sample respondents were working. Table 2 shows the classification of the respondents on the basis of the category of school in which they were working.

TABLE 2 : CATEGORY OF SCHOOL

S.No	Types	Number of respondents	Percentage
1	Government	55	55
2	Private	45	45
	Total	**100**	**100**

Source: Primary data

It is clear from Table 2 that of the 100 respondents i.e., 55 % are from government schools and 45% from private schools. Majority of the sample teachers (55%) were working in the government schools.

LEVEL OF SCHOOL

The sample respondents in the study area belong to primary, middle, high schools and higher secondary schools. Table 3 shows the classification of respondents on the basis of the level of school to which the respondents belong.

TABLE 3 : LEVEL OF SCHOOL

S.No	Level	Number of respondents	Percentage
1	Primary School	22	22
2	Middle School	29	29
3	High School	21	21
4	Higher Secondary School	28	28
	Total	**100**	**100**

Source: Primary Data

Table 3 shows 22 percent belonged to primary schools, 29 % were from middle school, 21 % from high schools and 28 % were from higher secondary schools. A majority of the respondents (49%) were working in the high schools and higher secondary schools.

ANNUAL SAVINGS OF THE RESPONDENTS

The savings normally depends upon the respondent's willingness to save money. Table 4 shows the classification of the respondents on the basis of their annual savings. 67 % of the respondents have annual saving less than Rs. 50,000 , 25 % save income between Rs. 50,000-1,00,000 and 8 % saved more than Rs. 1,00,000 per annum.

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TABLE 4 : CLASSIFICATION OF RESPONDENTS ON THE BASIS OF THEIR ANNUAL SAVINGS

S.No	Annual savings	Number of respondents	Percentage
1	< Rs 50,000	67	67
2	Rs 50,000 - Rs 1,00,000	25	25
3	> Rs 1,00,000	8	8
	Total	**100**	**100**

Source: Primary Data

AGE AND ANNUAL SAVINGS

A cross tabulation was taken between the age and the annual savings of the respondents (Table 5)and it could be inferred that of the 100 sample of school teachers, 67% were having annual savings below Rs. 50,000, 25 % had annual savings between Rs. 50,000 – 1,00,000, and remaining 8 % saved more than Rs. 1,00,000. Among the teachers those who save less than Rs 50,000, 26 were between 25-35 years of age, 21 were between 35-45 years of age and 18 belonged to above 45 years of age.12 teachers who were having the savings of Rs.50,000-1,00,000 belong to 35-45 years of age. 4 teachers who were having the savings more than 1,00,000 belonged to 35-45 years of age.

TABLE 5 : DETAILS OF AGE AND ANNUAL SAVING OF RESPONDENTS

S.No	Age	Annual Saving			Total
		< Rs 50,000	Rs 50,000 - Rs 1,00,000	> Rs 1,00,000	
1	< 25 Years	2	0	0	2
2	25-35 Years	26	5	1	32
3	35-45 Years	21	12	4	37
4	>45 Years	18	8	3	29
	Total	**67**	**25**	**8**	**100**

Source: Primary data

RELATIONSHIP BETWEEN ANNUAL INCOME AND ANNUAL SAVINGS

In order to analyze the relationship between the income and savings, chi-square test has been applied. Table 6 shows the cross tabulation between the Annual Income and Savings. It could be inferred that of the total sample respondents, 8 had annual income below Rs1,00,000, 33 were having an annual income of Rs. 1,00,000 – 2,00,000, 45 respondents having the income of Rs. 2,00,000-3,00,000, and remaining 14 respondents had annual income more than Rs. 3,00,000.

TABLE 6 : OPINION OF RESPONDENTS ON ANNUAL INCOME AND ANNUAL SAVING

S.No	Annual Income	Annual Saving			Total
		< Rs 50,000	Rs 50,000 - Rs 1,00,000	> Rs 1,00,000	
1	< Rs 1,00,000	7	1	0	8
2	Rs 1,00,000 - Rs 2,00,000	30	2	1	33
3	Rs 2,00,000 - Rs 3,00,000	30	13	2	45
4	> Rs 3,00,000	0	9	5	14
	Total	**67**	**25**	**8**	**100**

Source: Primary Data

CHI-SQUARE TEST

Chi-square test is applied in statistics to test the goodness of fit to verify the distribution of observed data with assumed theoretical distribution. Therefore it is a measure to study the divergence of actual and expected frequencies. It is commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis framed earlier.

$$\text{Chi-square test } (\chi^2) = \frac{(O-E)^2}{E}$$

O= Observed frequency , E= Expected frequency , Df=Degree of Freedom
Df= (r-1) (c-1)
R= row
C= column
Null Hypothesis: There is no significant relationship between the annual income and annual savings of the respondents.

RESULT OF THE CHI-SQUARE TEST

Degree of Freedom	6
Table value at 5 percent level	12.592
Calculated Value	42.659

Since the calculated value 42.659 is more than table value at 5 percent level of significance, we reject the null hypothesis it is concluded that there is a significant relationship between income and savings.

MODE OF SAVINGS OF THE RESPONDENTS

Table 7 shows the various modes of savings by the respondents.

TABLE 7 : MODE OF SAVINGS

S.No	Saving Mode	Number of Respondents	Percentage
1	Cash in Hand	18	13
2	Post Office	19	14
3	Bank Deposits	86	63
4	Others	14	10
	Total	**137**	**100**

Source: Primary Data

As it shown in the table 7 that 63 % of the respondents were saving their money in banks. 13 % were saving as cash, 14 % were saving money in post office schemes and remaining 10 % were saving their money through other modes.

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REASONS FOR SELECTING A PARTICULAR MODE OF SAVINGS

To know about the reasons for selecting a particular mode of savings, it is seen in Table 8 that for 59 % of the respondents, the reason for selecting a particular mode was "**Safety**" followed 26 % for high rate of interest. Good customer service, proximity, tax concession were reasons for 2 %, 0 %, 13 % of the respondents. Nearly 60 % considered "**Safety"** for selecting a particular mode of savings.

TABLE 8 : OPINION OF RESPONDENTS FOR SELECTING THE PARTICULAR MODE

S.No	Reasons	Number of Respondents	Percentage
1	High Interest	36	26
2	Safety	81	59
3	Good Customer service	2	2
4	Proximity	0	0
5	Tax Concession	18	13
	Total	**137**	**100**

Source: Primary Data

MAIN AVENUES OF INVESTMENT OF THE RESPONDENTS

Table 9 shows the classification of respondents on the basis of the main avenues of Investment. Bank deposits, post office, land and building, gold/silver, mutual funds, government securities were the major investment avenues available to the investors.

TABLE 9 : CLASSIFICATION OF RESPONDENTS ON THE BASIS AVENUES OF INVESTMENT

S.No	Avenues of Investment	Number of Respondents	Percentage
1	Bank deposits	81	57
2	Post Office	17	12
3	Land and Building	9	6
4	Gold/silver	19	14
5	Mutual funds	12	9
6	Government securities	3	2
	Total	**141**	**100**

Source: Primary Data

As it is shown in Table 9, 57 % of the investors preferred investing in bank deposits. Those who preferred post office, land and building, gold/silver, mutual funds, government securities were 12 %, 6 %, 14 %, 9 %, 2 % respectively. According to the sample respondents, **bank deposit was** considered the main avenues of the investment.

PURPOSE OF INVESTMENT

Table 10 shows the classification of the respondents on the basis of their purpose of investment.

TABLE 10 : CLASSIFICATION OF RESPONDENTS ON THE BASIS OF THE PURPOSE OF INVESTMENT

S.No	Purpose	Number of Respondents	Percentage
1	Children Education	50	34
2	Children Marriage	28	19
3	Tax Concession	15	10
4	Security after Retirement	27	18
5	Resale Purpose	1	1
6	Others	26	18
	Total	**147**	**100**

Source: Primary Data

It is clear from the Table 10 for 34 % of the respondents; the purpose of investment was their children's education. Children marriage, tax concession, security after retirement, were the purpose of investment amounted to 19 %, 10 %, 18 %, and only 1 % invested their money for resale purpose and 18 %invested for other purpose. Mainly the main purpose of the investment of the respondents was for their children's education followed by their marriage.

INVESTMENT DECISION MAKER

Table 11 shows the details regarding the investment decision maker. The decision regarding the investment was either taken by the investor or by other family members.

TABLE 11 : INVESTMENT DECISION MAKER

S.No.	Decision maker	Number of Respondents	Percentage
1	Self	34	34
2	Husband / Wife	61	61
3	Father	5	5
	Total	**100**	**100**

Source: Primary Data

Table 11 shows that 61 % of the respondents' spouses took the investment decision. 34% of the respondents made their investment decisions themselves. Only 5 % of the respondent's fathers make the decision.

ANALYSIS OF THE FACTORS INFLUENCING THE INVESTORS

The factors which influence the investors for the investment has been identified are as follows:
- High Rate of Return
- Tax Concession
- Safety
- Liquidity
- Convenience

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The sample respondents were asked to rank the factors according to their preference which influence the investment decision. Weights are given as under:

Rank	1	2	3	4	5
Type	Very high Influence	High Influence	Neutral	Low Influence	Least Influence
Weightage	5	4	3	2	1

The weighted average scores were calculated for each of the factors and on the basis of that overall ranks were given. Table 12 shows the ranking of the factors influencing the investment decision.

TABLE 12 : RANKING OF FACTORS INFLUENCING INVESTMENT DECISION

S.No	Factors	Weighted Average	Rank
1	High Rate of return	28.67	1
2	Tax Concession	22.93	3
3	Safety	26.86	2
4	Liquidity	17.33	4
5	Convenience	13.4	5

Source: Primary Data

Table 12 shows that among 5 factors influencing the investment decision, high rate of return got the first rank with 28.67 score, followed by safety , tax concession, liquidity, convenience. The main factor influencing the investment decision was high rate of return followed by the safety for particular investment.

RANKING OF PREFERENCE OF RESPONDENTS ON THE TYPE OF INVESTMENT

The sample respondents were asked to rank the factors on the basis of their preference on the type of their investment.

Rank	1	2	3	4	5
Type	Highly Preferred	Preferred	Neutral	Low Preferred	Least Preferred
Weightage	5	4	3	2	1

The weighted average scores were calculated for each factor and on that basis the rank were given. Five types of investments preferred by the sample respondents were government securities, primary and secondary market, gold/silver, bank deposits, land and building.

TABLE 13: RANKING OF PREFERENCE OF RESPONDENTS ON THE TYPE OF INVESTMENT

S.No	Types of Investment	Weighted Average	Rank
1	Government Securities	15.6	4
2	Primary and Secondary Market	15.13	5
3	Gold/silver	24.33	2
4	Bank Deposits	30.26	1
5	Land / Building	21.4	3

Source: Primary Data

Table 13 shows the ranking preference on the type of investment by using weighted average score method. Among five preference of the investment alternatives, first rank went to the bank deposits with 30.26 score followed by the gold/silver, land/ building, government securities, and primary and secondary market. Among the various investment alternative the first preference went to the investment in bank deposits.

IDEAL PERIOD OF INVESTMENT

The period of investment is very important factor while taking the investment decision. Table 14 shows the opinion of the respondents on the period of investment.

TABLE 14: OPINION OF RESPONDENTS ON THE PERIOD OF INVESTMENT

S.No	Period	Number of Respondents	Percentage
1	< 1 Year	9	9
2	1-2 Year	15	15
3	2-3 Year	18	18
4	3-6 Year	42	42
5	6 Year Above	16	16
	Total	100	100

Source: Primary Data

It can be inferred from the Table 14 that only 9 % of the respondents preferred to invest for less than 1 year. And those who preferred 1-2 years, 2-3 years, 3-6 years, and 6 years above were 15 %, 18 %, 42 %, 16 %. Majority of the respondents preferred to invest for 3- 6 years.

RANKING OF THE PREFERENCE OF RESPONDENTS ON FIXED INCOME INVESTMENT

The investments can be classified into two types i.e fixed return on investment and variable return on investment. The fixed rate of return on investment is government securities, bank deposits, preference, loans and bonds.

TABLE 15 : RANKING OF FIXED RETURN INVESTMENT SCHEME

S.No	Investment	Weighted Average	Rank
1	Government Securities	16.93	4
2	Bank Deposits	30.86	1
3	Preference Shares	17.6	3
4	Loans and Bonds	18.8	2

Source: Primary Data

It can be inferred from the Table 15 that first rank goes to bank deposits, followed by loans and bonds, preference shares and government securities. Among the choices of fixed return investment schemes, the most preferred choice was bank deposits.

RANKING OF PREFERENCE OF RESPONDENTS ON THE VARIABLE INCOME INVESTMENT

The variable return investment schemes were equity shares, mutual funds, land and building, gold/silver. The respondents were asked to rank their choice on variable income investment schemes.

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TABLE NO.16 : RANKING OF VARIABLE RETURN INVESTMENT SCHEMES

S.No	Investment	Weighted Average	Rank
1	Equity Shares	14.53	4
2	Mutual Funds	18.73	3
3	Land and Building	23.93	2
4	Gold /Silver	27.46	1

Source: Primary Data

It can be inferred from the Table 16 that first rank goes to the gold and silver followed by land and building, mutual funds, equity shares. Among the choices of variable income of investment the most preferred was gold/silver.

CLASSIFICATION OF RESPONDENTS ON THE BASIS OF EXPECTED RATE OF RETURN ON INVESTMENT

It was very important to know about the rate of return expected by the respondents. Table 17 shows the expected rate of return of the sample respondents.

TABLE 17: EXPECTED RATE OF RETURN OF RESPONDENTS

S.No	Expected rate of return(%)	Number of respondents	Percentage
1	Below 5 %	15	15
2	6-10 %	44	44
3	11-15 %	31	31
4	Above 15 %	10	10
	Total	100	100

Source: Primary Data

Table 17 shows that 44 % of the sample respondents wanted to have 6-10 % return on their investment. Those who expected to have 11- 15 % rate of return were 31 %, below 5 %were 15 %, and above 15 % were only 10 % of the respondents. More then three- fourth of the respondents expects more than 5 % rate of return.

GENDER AND EXPECTED RATE OF RETURN

The economic participation of women—their presence in the workforce in quantitative terms—is important not only for lowering the disproportionate levels of poverty among women, but also as an important step toward raising household income. Now a days women are no more behind men in earning and constructing their own investment portfolios. And generally seen that a woman expects more return than men for that the comparison on the gender with the expected rate of return.

TABLE 18 : GENDER AND EXPECTED RATE OF RETURN OF RESPONDENTS

S.No	Gender	Expected Rate of Return of Respondents				No. of investors
		Below 5 %	6-10 %	11-15 %	Above 15 %	
1	Male	3(8.75)	15(42.85)	11(31.42)	6(17.14)	35
2	Female	12(18.46)	29(44.61)	20(30.76)	4(6.15)	65
	Total	**15**	**44**	**31**	**10**	**100**

Source: Primary Data (figures in parenthesis represent percentages)

It can be seen in Table 18 that 42.85 % of the male sample investors and 44.61 % of the female sample investors expected 6-10 % of the return on their investments, 31.42 % of the male and 30.76 % of the female expected 11- 15 % of the return on the investment 17.14 % of male and 6.15 % of female expected the rate of return above 15 %, and 8.75 % of male and 18.46 % of female investors expected below five percent rate of return on their investment.

MARITAL STATUS AND EXPECTED RATE OF RETURN

Marital Status also plays very important role because of this the behavior of spending money differs and the expected rate of return by the investors also differs**.** The analysis has been done as shown in Table 19.

TABLE 19 : MARITAL STATUS AND EXPECTED RATE OF RETURN OF RESPONDENTS

S.No	Marital Status	Expected Rate of Return of Respondents				No. of investors
		Below 5 %	6-10 %	11-15 %	Above 15 %	
1	Single	4(40)	3(30)	2(20)	1(10)	10
2	Married	10(11.49)	40(45.97)	28(32.18)	9(10.34)	87
3	Divorced	0	1(100)	0	0	1
4	Widow	1(50)	0	1(50)	0	2
Total		**15**	**44**	**31**	**10**	**100**

Source: Primary Data

As it is clear from Table19 that 45.97 percent of the married sample investors, 30 % of the single, 100 % of the divorced sample investors expected to have 6-10 % of return on their investments.10 % of the singles and 10.34 % of the married sample investors expected their return more than 15 %.

ANNUAL SAVINGS AND EXPECTED RATE OF RETURN

Savings are very important for the every income earner. And with the saving the investors always wants a good return. So to see the impact of annual savings with the expected rate of return the analysis have been made which is presented in Table 20.

TABLE 20 : ANNUAL SAVING AND EXPECTED RATE OF RETURN OF RESPONDENTS

S.No	Annual Savings	Expected Rate of Return of Respondents				No. of investors
		Below 5 %	6-10 %	11-15 %	Above 15 %	
1	< Rs. 50,000	9(13.43)	34(50.74)	18(26.86)	6(8.95)	67
2	Rs. 50,000 – Rs.1,00,000	4(16)	8(32)	10(40)	3(12)	25
3	> Rs. 1,00,000	2(25)	2(25)	3(37.5)	1(12.5)	8
Total		**15**	**44**	**31**	**10**	**100**

Source: Primary data

It is clear from the Table 20 that 50.74 % of the investors with less than 50,000 annual savings range expected to have 6-10 % on their investment. 37.5 % of the investors with more than 1, 00,000 annual savings expected to have 11-15 % return on their investment.

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STUDENT'S T-TEST

The student T-Test has been applied to find out whether there is any significant relationship between the gender, marital status and annual savings of the sample of the investors and the expected rate of return on their investments. The t-value has been calculated by using the following formulae:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{(n_1 - 1)s^2_1 + (n_2 - 1)s^2_2}{n_1 + n_2 - 2}\left[\frac{n_1 + n_2}{n_1 n_2}\right]}}$$

For this purpose the following hypothesis has been framed.

Null Hypothesis: The relationship between the gender, marital status, and annual savings with expected rate of return of the respondents is not significant.

Particulars	Table Value@ 5 %	Calculated Value	Result
Gender and Rate of Return	1.960	-6.718	Not significant
Marital Status and Rate of Return	1.960	-4.344	Not significant
Annual Savings and Rate of Return	1.960	2.849	Significant

There is no significant relationship between the gender, marital status of the respondents and expected rate of return on their investments but significant relationship between the annual savings and the expected rate of return of the respondents.

ANNUAL INCOME AND EXPECTED RATE OF RETURN OF RESPONDENTS

Every person earning money always wants to increase their income fast In that case they want to invest part of their savings in which they can earn high rate of return. For this the analysis has been made as shown in table 21.

TABLE 21 : ANNUAL INCOME AND EXPECTED RATE OF RETURN OF RESPONDENTS

S.No.	Annual Income	Expected Rate of Return of Respondents				No. of investors
		Below 5 %	6-10 %	11-15 %	Above 15 %	
1	< Rs 1,00,000	1(12.5)	6(75)	1(12.5)	0	8
2	Rs 1,00,000 - Rs 2,00,000	6(18.18)	19(57.57)	6(18.18)	2(6.06)	33
3	Rs 2,00,000 - Rs 3,00,000	5(11.11)	18(40)	17(37.77)	5(11.11)	45
4	> Rs 3,00,000	3(21.42)	1(7.14)	7(50)	3(21.42)	14
	Total	**15**	**44**	**31**	**10**	**100**

Source: Primary Data

It is clear from the Table 21 that 57.57 % of the investors were earning between Rs.1, 00,000-2,00,000 annually and expected 6-10 % of the return on their investment. 50 % of the investors were earning more than Rs. 3, 00,000 annually expected 11-15 % return on their investment. 75 % of the investors earning less than Rs. 1, 00,000 expected 6-10 % return on their investments.

Null Hypothesis: There is no significant relationship between the yearly income of the respondents and the expected rate of return on investments.

TABLE 22 : ANOVA FOR EXPECTED RATE OF RETURN

Source of variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.423	3	1.808	2.567	0.059
Within Groups	67.617	96	0.704		
Total	**73.04**	**99**			

The ANOVA result shows that the significance value is 0.059 which is more than the level of significance which is 0.05. Hence there is no significant relationship between the annual income of the respondents and expected rate of return on their investments.

SUMMARY

The findings of the research study are summarized below:-

- Majority of the respondents were **female**, were in the age group of **25-45**, were **post graduate with B.Ed**, were married and managing their family expenditure only with their income.
- Majority of the respondents were having their annual income of 2, 00,000-3, 00,000 and more than three fourth of the respondents were managing their family expenditure by consulting their spouses.
- More than three fourth of the respondent's savings were below Rs.5, 00, 00.
- Nearly three fourth of the respondents save their money in bank as deposits and selecting **"safety"** for the mode of saving.
- Majority of the investors were regular investors. **Bank deposits** are considered as the main avenues of investment .and nearly two third of the respondents invested their money to meet out their **children education**.
- The main factor influencing the investment decision was **high interest rate**, followed by safety for the particular investment; among the various investments alternative high preference was given to the investment in **Bank Deposits**.
- There is significant relationship between income and saving.
- There is no significant relationship between gender, marital status but significant relationship between the annual savings of the sample investors and their expected rate of return.
- There is no significant relationship between the annual income of the respondents and the expected rate of return on their investments.

CONCLUSION

From this research study it is concluded that in today's world money plays a vital role in one's life and that the importance of money has been started being recognized by the school teachers community. They know the importance of money so they are initiated themselves to prepare the budget and lessen down their expenses to meet the future consequences. It has been evident from the study that most of the school teachers are saving their money as bank deposits for the purpose of their children's education, marriage and as security after retirement.

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AN EXPERIMENTAL STUDY ON PERCEPTION OF CELEBRITY ENDORSEMENT BY VIEWERS

JATIN PANDEY
STUDENT
SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING
MYSORE

NEEMA ARJUN BATHIJA
STUDENT
SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING
MYSORE

ANUPAMA SUNDAR
ASST. PROFESSOR
DEPT OF MANAGEMENT SCIENCE
SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING
MYSORE

ABSTRACT

Small groups of participants received an experimental pack that was completed in the presence of the experimenter and returned immediately upon completion. The experimenter pack contained a brief description of the study followed by the baseline measure. After completing the baseline measure, participants were asked to read a set of instructions that contained the experimental manipulations. Participants were randomly assigned either to the unpaid condition in which they were told that a celebrity endorses a product on a voluntary basis without receiving any payment or the paid condition in which they were told that same celebrity was paid 5 crores for endorsing the same product. After reading the instructions participants viewed the endorsement amount and competed the questionnaire. The results suggest that endorsement advertising effectiveness can be strongly influenced by consumers' inferences concerning whether the endorser truly likes the product. Advertisers, on the other hand, often appear to be satisfied with merely creating an association between a popular endorser and their product with the hope that the endorser's positive image will somehow "rub off" on the product. The present research suggests that advertisers should put more effort not only into choosing endorsers who are well matched with products, but also into making strong arguments and believable explanations for why endorsers truly do like the products they endorse.

KEYWORDS

Celebrity, Endorsement, Celebrity Endorsement.

INTRODUCTION

Celebrities are the people who enjoy public recognition by a large share of a certain group of people. Celebrity endorsement is a billion dollar industry with companies signing deals with celebrities aiming to stand out from their clutter and give them a distinctive and significant position in the mind of the consumers.

Celebrity endorser is someone known to the public for their achievements in the areas other than of the product class endorsed. The main purpose of using celebrity endorser is to influence consumer behaviour, especially purchase intention that is directly linked to revenue of the company. Celebrity Endorsement advertising is an important marketing tool which used at the correct time may prove to be far more rewarding.

Appeals by celebrities and other similar reference groups are used very effectively by advertisers to communicate with their markets. Celebrities can be a powerful force in creating interest or actions with regard to purchasing or using selected goods and services.

Across the world, celebrities have been used for a variety of brands, India has opened its markets only recently and it's witnessing an era of competition that it never experienced before. Friedman and Friedman (1979) suggest that a celebrity endorser is someone known to the public for their achievements in areas other than of the product class endorsed. Undoubtedly, the celebrity endorser could reinforce a company's marketing communications, positioning and represent its brand (Erdogan, 1999).However, the main purpose of using celebrity endorser is to influence consumer behaviour, especially purchase intention that is directly linked to revenue of the company. Firms have been juxtaposing their brands and themselves with celebrity endorsers (e.g. athletes, actors) in the hope that celebrities may boost effectiveness of their marketing for at least a century. One of the early examples is Queen Victoria's endorsement of Cadbury's Cocoa (Sherman 1985).

Regardless of these hindrances, celebrity endorsed advertising is an important marketing tool which when used at the correct time, may prove to be far more rewarding.

OBJECTIVE

This research examines whether consumers infer that celebrity endorsers like the products they endorse, and presents a model using these inferences and other characteristics of the endorser to predict attitudes toward the endorsed product.

LITERATURE REVIEW

Although past research documents a general tendency for consumers to believe in the purity of the motives of the celebrity endorsers, it is likely that this tendency varies substantially both across consumers and across endorsers. In short the effectiveness of a celebrity endorser is dynamic, dependent on the celebrity, the product and perhaps even societal conditions at the time and place where the advertisement is shown and also whether consumers will tend to make corresponding inferences about celebrity endorsers.

Companies frequently use spokespersons to deliver their advertising message and convince consumers of their brands. A widely used and very popular type of spokesperson is the celebrity endorser (Tom et al. 1992).

According to Friedman and Friedman a "celebrity endorser is an individual who is known by the public for his or her achievements in areas other than that of the product class endorsed." The reason for using celebrities as spokespersons goes back to their huge potential influence. Compared to other endorser types, famous people achieve a higher degree of attention and recall.

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They increase awareness of a company's advertising, create positive feelings towards brands and are perceived by consumers as more entertaining (Solomon 2002). A central goal of advertising is the persuasion of customers, i.e., the active attempt to change or modify consumers' attitude towards brands (Solomon 2002).

In this respect, the credibility of an advertisement plays an important role in convincing the target audience of the attractiveness of the company's brand. Pursuing a celebrity endorsement strategy enables advertisers to project a credible image in terms of expertise, persuasiveness, trustworthiness, and objectiveness (Till and Shimp 1998).

To create effective messages, celebrity advertisers also have to consider the attractiveness of the spokesperson (McCracken 1989). Source attractiveness refers to the endorser's physical appearance, personality, likeability, and similarity to the receiver, thus to the perceived social value of the source (Solomon 2002).

The use of attractive people is common practice in television and print advertising, with physically attractive communicators having proved to be more successful in influencing customers' attitudes and beliefs than unattractive spokespersons (Ohanian 1991).

Several Research studies have examined the congruency between celebrity endorsers and brands to explain the effectiveness of using famous persons to promote brands (e.g. Till and Busler 1998, Martin 1996, Till and Shimp 1998). Results show that a number of celebrity endorsements proved very successful, whereas others completely failed, resulting in the 'termination' of the respective celebrity communicator (Walker et al. 1992).

Empirical work on the congruency theory often has concentrated on the physical attractiveness of the endorser (e.g. Kahle and Homer 1985). According to Kahle and Homer (1985) attractive spokespersons are more effective in terms of attitude change when promoting brands that enhance one's attractiveness.

Though Ohanian (1991) acknowledges a popular person's ability to create awareness and initial interest for an advertisement, she concludes that this may not necessarily change consumer's attitude toward the endorsed brand. The author rather states, that "for celebrity spokespersons to be truly effective, they should be knowledgeable, experienced, and qualified to talk about the product."

MODEL PREDICTING ATTITUDE TOWARD THE ADVERTISED PRODUCT

FIGURE 3: MODEL PREDICTING ATTITUDE TOWARD THE ADVERTISED PRODUCT
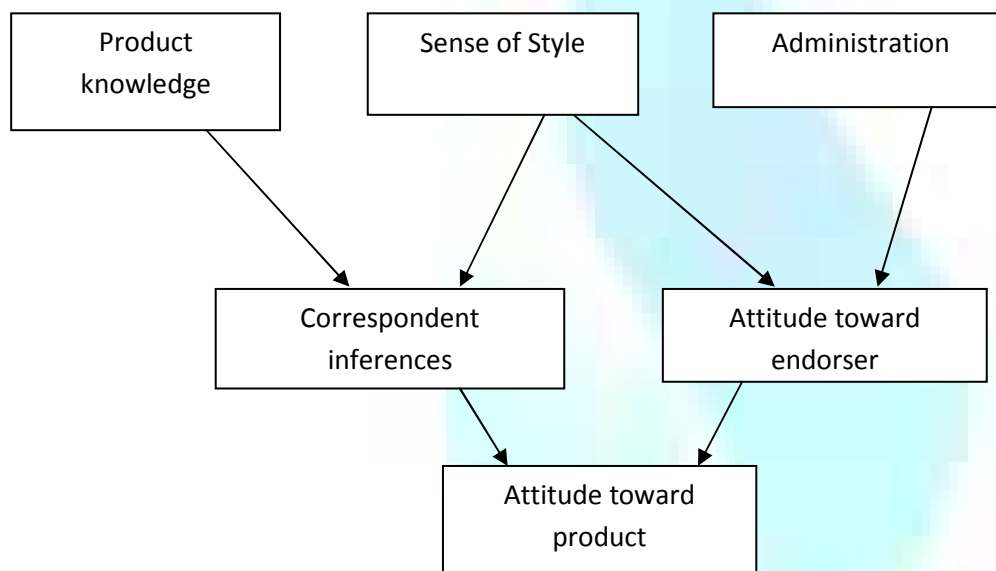
RESEARCH METHODOLOGY

PARTICIPANTS

The participants were 191 students, at Mysore who participated on a voluntary basis. The mean age of the participants was 21-25 years.

MATERIALS

- Baseline measure. Prior to examining any of the other experimental materials, participants were asked to indicate what they believed people in general think about the Pepsi soft drink and Vivel Di Will's soap on a scale from 1="not good at all" to 7="very good".
- Endorsement advertisement. Participants were shown a black and white PPT advertisement in which Sachin Tendulkar endorsed Pepsi soft drink and Kareena Kapoor endorsed Vivel Di Will's soap. The advertisement had a close-up picture of Sachin Tendulkar and Kareena Kapoor. The slogan was written at the bottom on the advertisement.
- Evaluation questionnaire. The evaluation questionnaire included measures of correspondent inferences, attitude toward the advertisement, attitude toward the product, and attitude toward the celebrity endorser. Each of the answer was answered on a seven-point scale ranging from 1="not at all likely" to 7="Extremely likely".

All attitude items used semantic differential scales with a value of one associated with the more negative word and a value of seven associated with the more positive word. Participants were also asked to rate how much they admired Sachin Tendulkar and Kareena Kapoor.

PROCEDURE

Small groups of participants received an experimental pack that was completed in the presence of the experimenter and returned immediately upon completion. The experimenter pack contained a brief description of the study followed by the baseline measure. After completing the baseline measure, participants were asked to read a set of instructions that contained the experimental manipulations. Participants were randomly assigned either to the unpaid condition in which they were told that Kareena Kapoor endorses Vivel on a voluntary basis without receiving any payment or the paid condition in which they were told that Kareena Kapoor was paid 5 crores for endorsing vivel brand .the amount was describes as Kareena Kapoor standard endorsement fee. After reading the instructions participants viewed the endorsement amount and competed the questionnaire.The same procedure was used for Sachin Tendulkar with a new set of participants in Small groups.

DATA ANALYSIS AND FINDINGS

The result of factor analysis was done on the celebrity scale and the results are shown in table 1 KMO statistics of 0.870 indicate sample adequacyand Bartlett's Test of Sphericity of significance of test of sphericity indicate that the factor model is appropriate and a total of two factors were extracted with 60% of variation explained. The items pertaining to celebrity endorsement scale the results of factor analysis were therefore justified Reliability table is also included where in cronbach's data should be above .70

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TABLE 1: KMO AND BARTLETT'S TEST FOR CELEBRITY SCALE

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.870
Bartlett's Test of Sphericity	Approx. Chi-Square	234.647
	Df	15
	Sig.	.000

TABLE 2: TOTAL VARIANCE EXPLAINED FOR CELEBRITY SCALE

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.580	59.674	59.674	3.580	59.674	59.674
2	.597	9.956	69.630			
3	.574	9.566	79.196			
4	.531	8.854	88.051			
5	.399	6.644	94.694			
6	.318	5.306	100.000			
Extraction Method: Principal Component Analysis.						

ANOVA

1) Taking Gender as a factor:

TABLE 4: ANOVA GENDER MALE WITH PAID AND UNPAID

		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	2.511	1	2.511	2.752	.100
	Within Groups	105.848	116	.912		
	Total	108.359	117			
AVGOP	Between Groups	.453	1	.453	.333	.565
	Within Groups	157.682	116	1.359		
	Total	158.135	117			
AVGUSE	Between Groups	.722	1	.722	.527	.469
	Within Groups	159.006	116	1.371		
	Total	159.728	117			
AVGAD	Between Groups	1.947	1	1.947	1.636	.203
	Within Groups	138.064	116	1.190		
	Total	140.011	117			
AVGCB	Between Groups	4.483	1	4.483	2.429	.122
	Within Groups	214.114	116	1.846		
	Total	218.597	117			
AVGP	Between Groups	4.225	1	4.225	2.668	.105
	Within Groups	183.699	116	1.584		
	Total	187.925	117			

TABLE 5: ANOVA FOR MALE WITH SACHIN AND KAREENA KAPOOR

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	7.125	1	7.125	8.164	.005
	Within Groups	101.234	116	.873		
	Total	108.359	117			
AVGOP	Between Groups	.113	1	.113	.083	.774
	Within Groups	158.021	116	1.362		
	Total	158.135	117			
AVGUSE	Between Groups	23.027	1	23.027	19.540	.000
	Within Groups	136.701	116	1.178		
	Total	159.728	117			
AVGAD	Between Groups	.638	1	.638	.531	.468
	Within Groups	139.373	116	1.201		
	Total	140.011	117			
AVGCB	Between Groups	7.661	1	7.661	4.213	.042
	Within Groups	210.936	116	1.818		
	Total	218.597	117			
AVGP	Between Groups	3.052	1	3.052	1.915	.169
	Within Groups	184.873	116	1.594		
	Total	187.925	117			

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TABLE 6: ANOVA GENDER FEMALE WITH PAID AND UNPAID

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	6.183	1	6.183	6.374	.014
	Within Groups	68.877	71	.970		
	Total	75.060	72			
AVGOP	Between Groups	2.620	1	2.620	1.570	.214
	Within Groups	118.485	71	1.669		
	Total	121.104	72			
AVGUSE	Between Groups	1.074	1	1.074	.745	.391
	Within Groups	102.328	71	1.441		
	Total	103.402	72			
AVGAD	Between Groups	4.333	1	4.333	4.562	.036
	Within Groups	67.442	71	.950		
	Total	71.776	72			
AVGCB	Between Groups	.674	1	.674	.555	.459
	Within Groups	86.280	71	1.215		
	Total	86.954	72			
AVGP	Between Groups	2.272	1	2.272	1.554	.217
	Within Groups	103.789	71	1.462		
	Total	106.062	72			

TABLE 7: ANOVA FEMALE WITH KAREENA KAPOOR AND SACHIN TENDULKAR

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	1.480	1	1.480	1.429	.236
	Within Groups	73.579	71	1.036		
	Total	75.060	72			
AVGOP	Between Groups	4.560	1	4.560	2.778	.100
	Within Groups	116.544	71	1.641		
	Total	121.104	72			
AVGUSE	Between Groups	3.275	1	3.275	2.322	.132
	Within Groups	100.127	71	1.410		
	Total	103.402	72			
AVGAD	Between Groups	.695	1	.695	.694	.408
	Within Groups	71.081	71	1.001		
	Total	71.776	72			
AVGCB	Between Groups	2.039	1	2.039	1.705	.196
	Within Groups	84.915	71	1.196		
	Total	86.954	72			
AVGP	Between Groups	.195	1	.195	.131	.718
	Within Groups	105.866	71	1.491		
	Total	106.062	72			

Taking into account the table 4 to table 7, we can come to a conclusion that the male viewers in comparison to general view of the product, usage of the product, and when it came to positive opinion about the Celebrity were more than the female viewers. When both Sachin Tendulkar and Kareena Kapoor were shown. The general view and advertisement for female viewers were more than their male counterparts.

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TAKING UNPAID AND PAID AS A FACTOR

TABLE 83: ANOVA UNPAID STUDY WITH GENDER

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	2.457	1	2.457	3.064	.083
	Within Groups	80.994	101	.802		
	Total	83.450	102			
AVGOP	Between Groups	.889	1	.889	.629	.430
	Within Groups	142.829	101	1.414		
	Total	143.718	102			
AVGUSE	Between Groups	5.387	1	5.387	4.572	.035
	Within Groups	119.009	101	1.178		
	Total	124.396	102			
AVGAD	Between Groups	6.062	1	6.062	5.692	.019
	Within Groups	107.569	101	1.065		
	Total	113.631	102			
AVGCB	Between Groups	5.965	1	5.965	3.386	.069
	Within Groups	177.951	101	1.762		
	Total	183.916	102			
AVGP	Between Groups	18.460	1	18.460	14.543	.000
	Within Groups	128.206	101	1.269		
	Total	146.666	102			

TABLE 94: ANOVA UNPAID STUDY WITH KAREENA KAPOOR AND SACHIN TENDULKAR

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	4.975	1	4.975	6.403	.013
	Within Groups	78.475	101	.777		
	Total	83.450	102			
AVGOP	Between Groups	3.836	1	3.836	2.770	.099
	Within Groups	139.882	101	1.385		
	Total	143.718	102			
AVGUSE	Between Groups	5.232	1	5.232	4.434	.038
	Within Groups	119.164	101	1.180		
	Total	124.396	102			
AVGAD	Between Groups	.072	1	.072	.064	.801
	Within Groups	113.558	101	1.124		
	Total	113.631	102			
AVGCB	Between Groups	5.117	1	5.117	2.890	.092
	Within Groups	178.799	101	1.770		
	Total	183.916	102			
AVGP	Between Groups	9.469	1	9.469	6.970	.010
	Within Groups	137.197	101	1.358		
	Total	146.666	102			

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TABLE 10: ANOVA FOR PAID WITH GENDER

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	.121	1	.121	.109	.742
	Within Groups	95.135	86	1.106		
	Total	95.256	87			
AVGOP	Between Groups	9.196	1	9.196	5.924	.017
	Within Groups	133.494	86	1.552		
	Total	142.690	87			
AVGUSE	Between Groups	1.864	1	1.864	1.122	.292
	Within Groups	142.860	86	1.661		
	Total	144.724	87			
AVGAD	Between Groups	1.391	1	1.391	1.221	.272
	Within Groups	97.945	86	1.139		
	Total	99.335	87			
AVGCB	Between Groups	.115	1	.115	.080	.778
	Within Groups	122.834	86	1.428		
	Total	122.948	87			
AVGP	Between Groups	.840	1	.840	.449	.504
	Within Groups	160.750	86	1.869		
	Total	161.590	87			

TABLE 115: ANOVA PAID STATEMENT WITH KAREENA KAPOOR AND SACHIN TENDULKAR

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	4.184	1	4.184	3.951	.050
	Within Groups	91.072	86	1.059		
	Total	95.256	87			
AVGOP	Between Groups	.038	1	.038	.023	.880
	Within Groups	142.652	86	1.659		
	Total	142.690	87			
AVGUSE	Between Groups	21.374	1	21.374	14.902	.000
	Within Groups	123.351	86	1.434		
	Total	144.724	87			
AVGAD	Between Groups	.285	1	.285	.247	.620
	Within Groups	99.051	86	1.152		
	Total	99.335	87			
AVGCB	Between Groups	5.741	1	5.741	4.213	.043
	Within Groups	117.207	86	1.363		
	Total	122.948	87			
AVGP	Between Groups	.208	1	.208	.111	.740
	Within Groups	161.382	86	1.877		
	Total	161.590	87			

Taking into account table8 to table 11, we can come to a conclusion that the male viewers in unpaid study with the gender of use of the product, advertisement of the product, general opinion about the celebrity were more than the female viewers. In the celebrity paid with the gender in general view, use of the product male viewers were more than the female viewers and the celebrity personnel of the female viewers were more than the male viewers. The number of male viewers was more than the female with respect to general view and use of the product and celebrity opinion was more by the female viewers than the male users

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TAKING KAREENA AND TENDULKAR AS A FACTOR

TABLE 12: ANOVA KAREENA KAPOOR WITH GENDER

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	1.839	1	1.839	1.935	.168
	Within Groups	86.507	91	.951		
	Total	88.346	92			
AVGOP	Between Groups	10.223	1	10.223	6.262	.014
	Within Groups	148.561	91	1.633		
	Total	158.784	92			
AVGUSE	Between Groups	10.504	1	10.504	9.047	.003
	Within Groups	105.661	91	1.161		
	Total	116.166	92			
AVGAD	Between Groups	7.444	1	7.444	6.113	.015
	Within Groups	110.803	91	1.218		
	Total	118.246	92			
AVGCB	Between Groups	.266	1	.266	.184	.669
	Within Groups	131.854	91	1.449		
	Total	132.120	92			
AVGP	Between Groups	4.323	1	4.323	2.384	.126
	Within Groups	164.998	91	1.813		
	Total	169.321	92			

TABLE 136: ANOVA KAREENA KAPOOR WITH PAID AND UNPAID

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	3.460	1	3.460	3.709	.057
	Within Groups	84.886	91	.933		
	Total	88.346	92			
AVGOP	Between Groups	.414	1	.414	.238	.627
	Within Groups	158.370	91	1.740		
	Total	158.784	92			
AVGUSE	Between Groups	5.857	1	5.857	4.832	.030
	Within Groups	110.309	91	1.212		
	Total	116.166	92			
AVGAD	Between Groups	4.530	1	4.530	3.625	.060
	Within Groups	113.716	91	1.250		
	Total	118.246	92			
AVGCB	Between Groups	1.238	1	1.238	.861	.356
	Within Groups	130.882	91	1.438		
	Total	132.120	92			
AVGP	Between Groups	2.067	1	2.067	1.124	.292
	Within Groups	167.255	91	1.838		
	Total	169.321	92			

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TABLE 147: ANOVA SACHIN TENDULKAR WITH GENDER

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	.133	1	.133	.144	.705
	Within Groups	88.306	96	.920		
	Total	88.439	97			
AVGOP	Between Groups	.262	1	.262	.200	.656
	Within Groups	126.005	96	1.313		
	Total	126.267	97			
AVGUSE	Between Groups	1.065	1	1.065	.779	.380
	Within Groups	131.167	96	1.366		
	Total	132.232	97			
AVGAD	Between Groups	1.177	1	1.177	1.133	.290
	Within Groups	99.651	96	1.038		
	Total	100.828	97			
AVGCB	Between Groups	1.801	1	1.801	1.054	.307
	Within Groups	163.998	96	1.708		
	Total	165.798	97			
AVGP	Between Groups	9.556	1	9.556	7.296	.008
	Within Groups	125.741	96	1.310		
	Total	135.297	97			

TABLE 158: ANOVA SACHIN TENDULKAR WITH UNPAID AND PAID

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AVGGV	Between Groups	5.862	1	5.862	6.815	.010
	Within Groups	82.577	96	.860		
	Total	88.439	97			
AVGOP	Between Groups	1.791	1	1.791	1.381	.243
	Within Groups	124.476	96	1.297		
	Total	126.267	97			
AVGUSE	Between Groups	.010	1	.010	.007	.933
	Within Groups	132.222	96	1.377		
	Total	132.232	97			
AVGAD	Between Groups	1.771	1	1.771	1.716	.193
	Within Groups	99.057	96	1.032		
	Total	100.828	97			
AVGCB	Between Groups	.747	1	.747	.435	.511
	Within Groups	165.051	96	1.719		
	Total	165.798	97			
AVGP	Between Groups	6.016	1	6.016	4.467	.037
	Within Groups	129.281	96	1.347		
	Total	135.297	97			

Taking into account all the table12 to table 15, we can come to a conclusion that the male viewers looking into consideration of celebrity as opinion, use of the product were significant more than the female viewers. In relation to Sachin Tendulkar as a personality male viewers were more than the female viewers and in the piod and unpaid segment interestingly, in the general view and use of the product female viewers were more than the male viewers, and in Sachin Tendulkar paid as a celebrity the general view male were more and in personality female viewers were more.

CONCLUSION

Celebrity endorsers have managerial significance. A 'right' celebrity endorsement strategy can be an effective competitive weapon in mature and saturated markets in order to differentiate products from competitors, since there is a heavy advertising clutter and almost no room for actual product differentiation in markets However, at times, celebrity qualities may be inappropriate, irrelevant, and undesirable so as to select a 'right' celebrity endorser becoming a challenge for many firms. Thus, it is necessary from consumer perspective to address a major question: how can companies select and retain the 'right' celebrity among many competing alternatives and manage this resource, as well avoiding potential pitfall.

The high costs associated with product advertising make it imperative that advertising messages effectively increase consumers' interest in the product. With that in mind, studies that examine characteristics of advertisements that make them effective are especially valuable. The present experiments represent a first step in identifying what makes endorsement advertisements effective based on work in attribution theory within social psychology. The results suggest that endorsement advertising effectiveness can be strongly influenced by consumers' inferences concerning whether the endorser truly likes the product. Advertisers, on the other hand, often appear to be satisfied with merely creating an association between a popular endorser and their product with the hope that the endorser's positive image will somehow "rub off" on the product. The present research suggests that advertisers should put more effort not only into

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choosing endorsers who are well matched with products, but also into making strong arguments and believable explanations for why endorsers truly do like the products they endorse.

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ANNEXURE

Questionnaire

Section-A

1)   What do the people in general think about the Pepsi/vevil ?

Not Good at all	1	2	3	4	5	6	7	Very Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Not Likeable	1	2	3	4	5	6	7	Likeable
Uninteresting	1	2	3	4	5	6	7	Interesting
Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Not nice	1	2	3	4	5	6	7	Nice
Unhealthy	1	2	3	4	5	6	7	Healthy
Not exciting	1	2	3	4	5	6	7	Exciting
Not Energiser	1	2	3	4	5	6	7	Energiser
Not Tasty	1	2	3	4	5	6	7	Tasty
Not Quest thrust	1	2	3	4	5	6	7	Quest Thrust

Section-B

2)   In your opinion how likely is it possible that Sachin Tendulkar/ Kareena Kapoor

Likes the Pepsi/vivel brand								
Not at all likely	1	2	3	4	5	6	7	extremely likely
Frequently uses the Pepsi/vivel brand								
Not at all likely	1	2	3	4	5	6	7	extremely likely
Views the Pepsi/vivel brand as a good product								
Not at all likely	1	2	3	4	5	6	7	extremely likely
Has faith in the brand Pepsi/vivel								
Not at all likely	1	2	3	4	5	6	7	extremely likely
Often uses the brand Pepsi/vivel								
Not at all likely	1	2	3	4	5	6	7	extremely likely
Looks at the Pepsi/vivel brand as a superior product								
Not at all likely	1	2	3	4	5	6	7	extremely likely

3)   Use Vivel/ Drinking Pepsi according to you is

Not good at all	1	2	3	4	5	6	7	very good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Not likeable	1	2	3	4	5	6	7	Likeable
Uninteresting	1	2	3	4	5	6	7	Interesting
Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Not nice	1	2	3	4	5	6	7	Nice
Unhealthy	1	2	3	4	5	6	7	Healthy
Not exciting	1	2	3	4	5	6	7	Exciting
Not Energiser	1	2	3	4	5	6	7	Energiser
Not tasty	1	2	3	4	5	6	7	Tasty
Not Quest thrust	1	2	3	4	5	6	7	Quest thrust

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4)	Advertisement of Pepsi according to you is							
Not Good at all	1	2	3	4	5	6	7	Very Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Not Likeable	1	2	3	4	5	6	7	Likeable
Uninteresting	1	2	3	4	5	6	7	Interesting
Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Not nice	1	2	3	4	5	6	7	Nice
Unhealthy	1	2	3	4	5	6	7	Healthy
Not exciting	1	2	3	4	5	6	7	Exciting
Not Energiser	1	2	3	4	5	6	7	Energiser
Not Tasty	1	2	3	4	5	6	7	Tasty
Not Quest thrust	1	2	3	4	5	6	7	Quest Thrust
5)	Kareena Kapoor / Sachin Tendulkar as a celebrity/person is							
Unpleasant	1	2	3	4	5	6	7	Pleasant
Not likeable	1	2	3	4	5	6	7	Likeable
Disinteresting	1	2	3	4	5	6	7	Interesting
Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Not Nice	1	2	3	4	5	6	7	Nice

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GENDER BUDGETING AS A TOOL FOR WOMEN EMPOWERMENT

R.ARUNAJAYAMANI
LECTURER
SCHOOL OF GOVERNANCE & PUBLIC POLICY
RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT
AN AUTONOMOUS ORGANISATION OF MINISTRY OF YOUTH AFFAIRS & SPORTS, GOVERNMENT OF INDIA
BEEMANTHANGAL

ABSTRACT

"Gender Budgeting" is now recognized as a tool for empowering women by incorporating gender perspective and concerns at all levels and stages of development planning, policy, programs and delivery mechanism. Government of India has adopted gender budgeting for gender equity as mission statement and is widely disseminating tools and strategies across ministries and departments. The government budget is not simply a technical instrument for compiling and reporting on government revenue and expenditure plans but it is also a primary policy statement made by the government. The budget has three crucial economic functions viz. allocation of resources, distribution of and wealth, and stabilization of economy. Gender responsive budgets seek to uncover the impact of resource allocations on women, men, girls and boys. With this background this paper mainly focuses on women empowerment through Gender Budgeting.

KEYWORDS
Gender Budget, Gender Audit.

INTRODUCTION
Gender Budgeting" is recognized as a tool for empowering women. It means looking on the government budget with a gender perspective in order to assess how, it addresses the needs of women in all respect. It is not that seeking to create a separate budget, but to provide an affirmative action to address the specific needs of women and translate gender commitments into budgetary commitments.

Gender Budgeting lends itself to strengthening the administrative processes and actions to achieve the targets for improving the status of women. It is not only entails an analysis of allocation of resources of women related programmes but it also studies in-depth to cover tracking the utilization of allocated resources and impact analysis. It also verifies through beneficiary analysis of public expenditure and policy from a gender perspective. Hence gender budgeting is not an accounting exercise as commonly perceived and understood. It encompasses incorporating a gender perspective and sensitiveness at all levels and stages of the development process of planning, programs and implementation.

MEANING AND DEFINITION OF GENDER BUDGETING
Gender budgeting refers to the process of analyzing, conceiving, planning, approval, execution, monitoring, and auditing budgets in a gender-sensitive way. It involves analysis of actual expenditure and revenue (usually of the Government) on and from women as compared to on and from men and it helps Governments to take decision that how policies need to be made, adjusted and implemented. It is a tool for effective policy making and implementation, where there is possibility of check if the allocations are in line with policy commitments and are having the desired impact towards achieving gender equality and women's empowerment.

"Gender budget initiatives analyze how governments raise and spend public money, with the aim of securing gender equality in decision-making about public resource allocation; and gender equality in the distribution of the impact of government budgets, both in their benefits and in their burdens. The impact of government budgets on the most disadvantaged groups of women is a focus of special attention." (IDRC, 2001)

"'Gender-sensitive budgets', 'gender budgets', and 'women's budgets' refer to a variety of processes and tools aimed at facilitating an assessment of the gendered impacts of government budgets. In the evolution of these exercises, the focus has been on auditing government budgets for their impact on women and girls. This has meant that, to date, the term 'women's budget' has gained widest use. Recently, however, these budget exercises have begun Using gender as a category of analysis so the terminology 'gender-sensitive budgets' is increasingly being adopted. It is important to recognize that 'women's budgets' or 'gender-sensitive budgets' are not separate budgets for women, or for men. They are attempts to break down, or disaggregate; the government's mainstream budget according to its impact on women and men, and different groups of women and men, with cognizance being given to the society's underpinning gender relations." (Sharp, Rhonda: 1999)

WOMEN AND THE CONSTITUTION OF INDIA
In India, the commitment to gender equity is well entrenched at the highest policy making level - the Constitution of India has given lot of provisions in order to avoid discrimination against sex and to bring balanced society by providing equal opportunities to all in the development process. It is discussed under

1.   Article 14 –Equal rights and opportunities on men and women in political, economic and social spheres.
2.   Article 15 – Prohibits discrimination against any citizen on the ground of sex, religion, caste etc.
3.   Article 15(3) – Empowers the state to make affirmative discrimination in favor of women.
4.   Article 16 – Provides for equality of opportunities in public appointments of all citizens.
5.   Article 39 – Providing equal right to means of livelihood and equal pay for equal work.
6.   Article 42 – Directs the state to ensure just and humane condition of work and maternity relief.
7.   Article 51 (A) (e) – Mandates every citizen to renounce practices derogatory to the dignity of

WOMEN AND FIVE YEAR PLANS
The National Policy on Empowerment of Women 2001, envisaged the introduction of a gender perspective in the budgeting process as an operational strategy. In addition to that, the plan documents have over the years emphasized the evolving of inclusive growth in gender issues. Formal earmarking of funds for women began with the Women's Component Plan. However, gender sensitivity in allocation of resources and women as an important segment of development was actually commenced only from the Seventh Plan, onwards. The Eighth Plan highlighted, for the first time a gender perspective and the need to ensure a definite flow of funds from the general developmental sectors to women oriented development strategies. The Ninth Plan adopted the 'Women's Component Plan' as one of the major strategies and directed both the Central and State Governments to ensure "not less than 30 percent of reservation in the funds/benefits earmarked in the women's related development programmes. The Tenth Plan reinforced commitment to gender budgeting to establish its gender-differential impact and to translate gender commitments into budgetary commitments.

Gender Budgeting will be an effective instrument in reducing gender discrimination and addressing socio –economic inclusive growth of women because, the policies can only possible to achieve, if sufficient funds are allocated for their implementation, women's and men's needs, concerns and priorities differ due to their different roles in the society.

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EFFECTS OF GENDER BUDGETING

Gender budget focusing on creating the following key effects which are generic in nature and essential for any development process to ensure efficiency, effectiveness, accountability, gender equality and value of money which is going in to implementation.

I. Observation on the achievement of policy goals

It acts as a tool to monitor the gap between targets and achievements of the Millennium Development Goals or country's policy and plan goals in a gender-centric manner.

II. Achieving gender equity/equality

Achieving gender equity requires equality of outcomes for women and men. It implies that the recognition in fulfilling the different needs, preferences and interests, which affect the way women and men benefit from the policies through budgetary allocations. If necessary, special provisions to be made to women for better utilization of resources towards coordinated development.

III. Advancing the realization of women's rights

Gender-responsive budgeting attempts to measure the gaps between policy commitments in respect to human and women's rights instruments (including CEDAW), the adequacy of resource allocations, and the outcomes of both.

IV. Poverty Alleviation

It is widely acknowledged that the social development indicators for women are far worse in comparing men belonging to the same social-economic strata, that woman and men are experiencing poverty differently, and face different constraints to overcome poverty. Women are also more affected by poverty than men. If women's needs are not taken with special care, poverty reduction policies will lead to risk ultimately move towards biased development, increases gap in utilization of resources lead to imbalanced growth.

V. Enhancing economic efficiency

Several studies have proved that there is a positive correlation between diminishing gender inequality and higher growth rates in national and per capital income. Women's productivity increases proportionately, if their access to information, credit, and extension services, inputs, and markets etc. Their time burden is reduced through, for example, the investment in labor-saving infrastructure will improve the economic efficiency.

VI. Achieving good governance

The process of improving the mechanism for delivery of goods and services to women and men in a fair, just, and responsible way has to be considered as an integral part of the definition of good governance. It will be achieved through participatory approach by involving different sections of citizens of our country including women. The participatory process allows a woman to express her views, problems and contributes for chalking out the effective development strategy and its implementation.

VII. Enhancing accountability and transparency

Gender Budgeting is a powerful tool for highlighting gaps between international commitments (such as those established at the Fourth World Conference on Women in Beijing in 1995, CEDAW) and in national policy documents and the amount of public spending earmarked for the achievement of gender specific bench marks and targets. Gender budgeting necessitates the availability of sex-disaggregated data and the accessibility to programmatic information. By tracking how allocated money is spent, it increases both accountability and transparency. Every woman understands her responsibility in shaping their own development and makes the resources accountable through maintaining transparency by participatory approach.

TOOLS OF GENDER BUDGETING

There are number of tools will be used for Gender Budgeting in the process of empowering women. Effective utilization of these tools in a proper manner will be much useful to achieve positive change in social, economic and political empowerment. Some of the tools are mentioned under

1. Participatory Planning and Budgeting

- Involvement of women in decision making in developmental planning seen as key to success of all gender related budgeting initiatives.
- Women's needs and concerns have to be taken into account with Special care in fund earmarking.
- Women have to be treated as equal partners in decision making and implementation rather than as beneficiaries. Though women are lagging behind in skills and capacities in doing things, it is the responsibility of the governments and other developing organizations to develop new skills or reskilling and capacity building suitable to the present situation.

2. Spatial Mapping- Macro level planning for micro level needs

- Women's empowerment is a holistic requirement which entails adequate resource allocation in all areas including health, education, water and sanitation, nutrition, sustained employment, access to credit, asset ownership, skills, research, technology design and political participation. Regional imbalances (rural- urban) have to be corrected. Spatial mapping of social infrastructure and access to employment opportunities for women would clearly highlight the resources available, overall gaps, resource allocation and required, based on size of population and yardsticks for availability of facilities etc.

3. Gender Based Profile of Public Expenditure

- Preparation of profile facilitates the review of all schemes and public expenditures from a gender perspective and isolating the gender component by way of expenditures and physical targets. It would give a clear cut situational analysis of constraints like non availability of sex disaggregated data; need to determine reasons for non adherence to targeted expenditures on women, etc. Trend of the gender component, allocations and expenditures are indicative of extent to which, budgeting is gender responsive.

STAGES OF GENDER BUDGETING

It is well known international tool, encompassing most of the above tools.

1. An analysis on the allocation of resources of the situation for women and men (and the different sub- groups) in a given sectoral planning.
2. An assessment of the extent to which the sector's policy addresses the gender issues and their gaps described in the first step. This step should include an assessment of the relevant legislation, policies, programmes and schemes. It includes an in-depth analysis of both written policies as well as implicit policies reflected in government activities. It should examine the extent to which the above stages meet the socio-economic and other rights of women.
3. An assessment of the adequacy of budget allocations to implement the gender sensitive policies and programmes identified in step two.
4. Monitoring of whether the money has spent as planned, what are delivered and to whom? This involves checking both financial and physical deliverables (disaggregated by sex)
5. An assessment of the impact of the policies / programmes and the extent to which the situation described in step one has been changed, in the direction of greater gender equality.

DIFFERENCE BETWEEN GENDER BUDGETING AND GENDER AUDITING

Gender Auditing is a part of the Gender Budgeting process. Gender auditing is the process that is conducted after the budget has been adopted and implemented. It is the process of reviewing financial outlays – looking at trends over time, percentage shares etc; analyzing and assessing systems actually put in place, processes adopted, outcomes and impacts of budgetary outlays vis à- vis what was planned – all this through a gender lens. The figure below shows the various steps in the entire process of Gender Budgeting, of which there are 3 major components – Policy Appraisal, Gender Budgeting and Gender Auditing. Gender auditing is an essential part of the larger social auditing, which evaluates socio, economic, political and environmental benefits and also shortfalls. It is able to assess the **differential impact** of budgets, policies and plans on men and women and the progress in achieving gender equality and equity.

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Despite all legislations, policy commitments and planning, women remain a vulnerable section in our present society. Achieving women's empowerment in to a reality, it would have to go beyond current outlook on gender budgeting, which excludes several dimensions of the problem. It has to go with inclusive growth with broad based approaches, intern addresses planning, adequate resources allocation, programme designs targeted intervention and implementation based upon the requirements of women living at the bottom level with their real participation. This has to be supplemented by relentless reality checks at the field level. Gender mainstreaming has to be a guiding force in all these activities to maximize outreach of public expenditures and benefits for women. In this direction there will be a possibility of overlapping of gender and developmental issues will take place- it is inevitable, given in the wide gap in availability and requirement of socio-economic infrastructure in the country.

CONCLUSIONS

The Budget is an important tool in the hands of state for affirmative action for improvement of gender relations through reduction of gender gap in the development process. It can help to reduce economic inequalities, between men and women as well as between the rich and the poor (NCAS, 2003). Hence, the budgetary policies need to keep into considerations the gender dynamics operating in the economy and in the civil society. There is a need to highlight participatory approaches to pro-poor budgeting, bottom up budget, child budget, SC budget, ST budget, green budgeting, local and global implications of pro-poor and pro-women budgeting, alternative macro scenarios emerging out of alternative budgets and inter-linkages between gender-sensitive budgeting and women's empowerment. Serious examining of budgets calls for greater transparency at the level of international economics to local processes of empowerment.

Gender Commitments must be translated into Budgetary Commitment. By using our Right to Information (2005), transparency /accountability for revenue generation & public expenditure can be ensured. For Reprioritisation in public spending we must prepare our 'bottom up budgets'. Gender economists must lift the veil of statistical invisibility of the unpaid 'care economy' managed by poor women and highlight equality & efficiency dimension and transform macro-policies so that they become women friendly.

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AN CONTRASTING ASSESSMENT OF THE ATTITUDE FUNCTIONS OF CONSUMER TOWARDS DURABLES-FMCG, A STUDY AMONG URBAN WORKING WOMEN IN KERALA

ANILKUMAR. N
RESEARCH SCHOLAR, KARPAGAM UNIVERSITY, COIMBATORE; &
CHIEF MANAGER
FACT UDYOGAMANDAL COMPLEX
KOCHI

ABSTRACT

Consumer attitude is a learnt predisposition to respond to an object or act consistently in a favorable or unfavorable manner and is shaped by one's values and beliefs which are learnt. In contrast, beliefs are consumer's subjective perception of how well a product or brand performs on different attributes. The various approaches to change the consumer attitude are like Changing beliefs about the extent to which a brand has certain attributes; Changing the perceived importance of attributes; and adding new attributes to the product etc. Only by changing the consumer's attitude can he/she be influenced to enact a merchandise transaction in the modern marketing mileau. Hence the importance of attitude change is of paramount importance to marketers who are consumer centric in the modern age often customizing the products/services to match the tastes of the consumer by proper positioning and targeting strategies. In this study the consumer attitude towards two different class of products like the FMCG and White goods are contrasted among the working women in an urban habitat ,the Kochi metro in Kerala , the commercial hub and leading test marketing site in India .Over the past decade, Kochi has evidenced substantial growth in sales/consumption of both branded FMCG and Durables with a noticeable change in consumer attitude on spending/consumption of goods for family use(affinity for modernity with higher buying power), which is explored herein. The various facets/behavior of the working/Career women as Urban MC Consumer are brought out, to enable facilitate appropriate marketing strategies by this study.

KEYWORDS

Consumer attitude, TPB, Katz functional theory, attitude change, attitude function, TAM, FMCG, White goods, Consumption motive, Salient Attributes, Benefits.

INTRODUCTION

Attitude as a behavioral construct is a learnt predisposition to respond consistently towards an object(product or service) in a favorable or unfavorable manner. Direct personal experience with a product/service is an important factor in the formation of attitudes. Consequent attitudes developed tend to be strong, more enduring & resistant to change while those attitudes formed as a result of indirect experience like exposure to Ads/brands. Apart from direct personal experience, reference groups like family, friends, close relatives, media persons/celebrities influence a consumer's attitude formation. Consumer behavior is altered by changing the attitudes or reinforcing the existing attitudes about the brand/product or services through persuasion messages via Ads in mass media. Attitude is formed from direct experience, family and SRG influence, direct marketing, mass media persuasion and personality though attitude change through change in belief-evaluation, resolving conflicting attitudes, altering attitude function, adding attributes, altering brand rating, change beliefs on other brands, persuasion as per ELM and association of product with SRG. Motives lead to beliefs (cognitive) and feelings (affect) driving attitude and in turn behavior(conation) is well known. In the purchase of durables, the higher involvement of consumer cause attitude to drive behavior while for FMCG, behavior drives attitudes.

ADDRESSING THE ATTITUDE FUNCTIONS TO ALTER ATTITUDE/MOTIVE OF CONSUMER

Attitudes differ as per the function they serve for the consumers (Katz 1960, Maio & Olson, 2000). As per Katz (1960), attitude exist to fulfill one or more goals of the consumer like reward maximization, express values of the self, defend against threat ideas & satisfy the thirst for knowledge. Although several attitude functions have been addressed vide earlier research of the 1950's, the recent research have focused on unanimous distinction between instrumental and symbolic functions of attitude (Ennis and Zanna 2000, Abelson and Prentice 1989, Berger and Heath 2007, Johar and Sirgy 1991, Prentice 1987; Shavitt, Lowrey and Han 1992). While some products give rise to predominantly utilitarian attitude, other products support dominantly symbolic attitudes (Shavitt, Lowrey and Han 1992). Attitude function matching appeals are used to change the attitudes; a symbolic attitude is best changed by symbolic value related arguments (Katz 1960). The advantages of function matching (versus mismatching) appeals are well documented (Bazzini and Shaffer 1995; Clary etal.1994,Lavine and Snyder 1996;Murray,Haddock and Zanna 1996;Petty and Wegener 1998).Thus the product centered approach to attitude functions has been a boon to marketing (Shavitt, Lowrey and Han 1992). Attitudes can serve multiple functions towards some products with strong utilitarian and symbolic aspects-mixed function products9Shavitt, Lowrey and Hans 1992).Persuasive appeals are more successful when they match the function of the targeted attitude. Attitude function changes with the branding and may not match at the product's category level attitude function. In the light of the intense retail environment, .identifying the attitude function of the consumer is very cardinal. The idea that attitudes can serve different functions is not new (Katz 1960; Smith, Bruner and white 1956). Katz (1960) described consumers as motivated to attain a variety of goals like maximizing concrete rewards, expressing values and the self, defending the self against threats. In Katz's framework, attitudes exist for a reason or to fulfill one or more of those goals. The functional/instrumental function has been contrasted with the symbolic function vide the studies of Prentice (1987),Ennis and Zanna (2000),Abelson and Prentice (1989), Johar and Sirgy (1991), Shavitt,Lowey and Han (1992), Berger and Heath (2007).Attitude differ by the way they serve in terms of the functions. Consumers who differ on certain traits will exhibit corresponding differences in attitude functions (Bazzini and Shaffer 1995, Debono 1987, Lavine and Snyder 1996, Petty and Wegener 1998). Some of the products serve specific attitude functions, viz., attitude towards Toothpaste, Cough syrup etc., based on utilitarian function (Shavitt1990, Shavitt, Lowrey and Han 1992) and other products like Flags, Rings serving symbolic function (Shavitt, Lowrey and Han 1992); however attitudes can serve more than one function for products like sunglasses, motor cars etc (Shavitt, Lowrey and Han 1992).The understanding of the attitude functions serve the knowledge to change the attitudes, to tune the appeals/arguments to match the attitude functions. This function matching is well researched in the past (Clary etal.1994; Bazzini and Shaffer 1995; Murray, Haddock and Zanna 1996; Lavine and Snyder 1996; and Petty and Wegener 1998). Both utilitarian and symbolic appeals influence consumers attitude to different products/brands categories (Lutz 1981,Shavitt,Lowrey and Han 1992).Research into the role of emotions/affect in shopping are available (Ray and Walker,2004;Spears,2005). As per Duncan (2005) Consumer motive is the internal impulses which when stimulated initiate some response, as consumers are continuously reacting to their internal impulses as well as external environment. Kim and Jim (2001) stated that consumer motives are drivers of behavior that bring the consumers to the shop for purchase. Tauber (1972) propounded that consumers were often motivated by many personal and social factors actually unrelated to the need for buying/consuming products/services. There exist ulterior motives which reflect in the attitude. The information seeking function as per Tauber encompassed information search, comparison and analysis. Nonetheless impulsive buying has been evidenced driven by hidden forces like social interaction/reference group affiliation/peer pressure/social comparison etc. Thompson etal. (1990) observed that both hedonic and utilitarian functions coexisted among consumers, and one mode tended to dominate in some consumer segments. Numerous research focusing on the feelings of mastery experienced/feeling of expression of ego or obtain satisfaction of a good deal in shopping are available (Feick and Price, 1987; Lichtenstein etal., 1990; Schindler,1989; Slama and Williams,1990). Also Tauber (1972), Rohm and Swaminathan (2004) identified buying motives that fetch enjoyment as a leisure activity for the consumer. Consumer may desire to seek higher level of experiential consumption relative to utilitarian consumption(Kim,2001).Positive emotions

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of the consumers are significant determinants in buying behavior like the patronage benefits, excitement on outing, time/money spend on valued priorities, as per the study of Kim etal.(2002) on apparels on utilitarian versus hedonic functions of attitude. Haanpa (2005) made a study on the different shopping motives of consumers in Finland on experiential and gratification factors, Hedonic/Recreational, Economic and Convenience types with the younger ones cherishing enjoyment on social and emotional front. Parsons (2002) put forth that in inline buying, the driving forces are motives like self gratification, learning new trends, diversion, social comparison, communication, status symbol and interaction with other consumers with similar taste. Peter and Donnell (2007) pointed out that social influences like culture, social class, reference groups and family can cause consumer motives, while they also stated that the marketing mix also influences the consumer motives substantially. Belk (1975) studies and found that situational influences like physical/social features, time, task and current conditions etc, have impact on motives. Glitomer .J(2005) stated that price is the main motive in buying and which was supplemented by Kim and Jim(2001) that product considerations like assortment, quality and pricing are critical attributes influencing consumer purchase motive. Jin(2005) put forth that consumer perception about price-quality are most important factors in purchase. Many value conscious consumers buy products on the basis of price than other attributes (Peter and Donnely, 2007). However, Wood, Lias. M and Barry. J.P (2006) pointed out that differences in product quality do not significantly affect brand preference. A durable product has the ability to perform it's functions like overall durability, reliability, ease of operation/repair, performance and other valued attributes forming part of the attitude functions of the consumer triggering motivation to purchase the products and use them. (Kotler and Amstrong,2006). Consumers would often reject home ware with mass appeal and prefer products that are tailored to reflect their specific needs (Elsasser, 2004). The various functions of attitude lead to the consumer's overall attitude toward engaging in the given purchase decision, thus influencing behavioral intention (Hawkins et al., 2001). The attitude toward the behavior or action reveals the consumer's inclusive evaluation of engaging in the behavior. Behavioral intention reflects the consumer's plan of action or a proposition associating one's self with a future consumption action or behavior (Peter & Olson, 1999). Price is the main motive in buying as per Gitomer.J (2005). Souryamoorthy (1997) stated that durables served as the status enhancement tool. Consumer assorts/compares various brands/products in their evoked/consideration set. The consumer evaluates alternatives in terms of functional, psychological benefits as per salient product attributes to match the need-attitude function.

STATEMENT OF THE PROBLEM

The consumer tastes are changing because of perceived changes in the family, work life & societal situations. These changes are being felt in the way consumers demand their products to realize value for money. The underlying aspects influencing the current purchase attitude towards two class of products (FMCG-Personal body care items and white goods-durables for common family consumption) is the study, in view of the tremendous growth of these sectors/ industry in Kerala over the past decade, specifically at Kochi.

UNIVERSE OF STUDY

Kochi, the commercial capital and fastest growing metro in the Kerala State is chosen as the universe. Kochi has evolved as a premier test marketing site for all the leading products launched in India due to the higher female literacy level and acculturation. Keralites are known for their cosmopolitan acceptance of consumer products and Kochi happens to account for almost 70% of the recent total sales /year of over Rs.370 Crores of White goods sales per year in Kerala which has been growing by leaps and bounds in the past decade due to promising 19% market growth and higher demand potential with even dealers/consumers from other districts of Kerala and rural retailers depending on Urban market/dealers of Kochi. The traditional family lifestyles have undergone a paradigm shift, as also the culinary tastes in the kitchens of Kerala, assimilated western tastes, changed value systems/self esteem, influx of fashion and social comparison/awareness in the urban areas with higher consumption among the working women households is prevalent. The study is limited to Kochi city and urban suburbs and is aimed at the limited segment of middleclass domestic Consumer HHs (single entity) of Working women to study their purchase behaviour/attitude and Institutional/Commercial consumers are excluded. The consumer family units selected specifically as they form the single largest chunk of the growing urban market in White goods or FMCG and are mostly targeted in the market mix by the leading brands by both push and pull strategies. Both Durables and FMCG are considered to contrast between these to diverse class of products as attitude object from consumer perception, as a classic case.

OBJECTIVES OF STUDY

The objectives of this market research study is on consumer purchase behaviour with relevance to following specific objectives-
(1)To understand the relative importance of the attitude functions involved in the purchase of Durables (White goods) purchase by working women Consumers;
(2)To contrast the purchase attitude function for the Personal body care items (FMCG products) for common family consumption and the Durables(White goods- appliances) purchase by working women Consumers;
(3).To identify the Urban consumer behavior variables towards FMCG Vs White Goods- Durables in family purchases with relevance to the HH income.

FORMULATION OF HYPOTHESIS

H01: There exist significant positive correlation between the income of Consumer and the overall purchase attitude towards durable goods and FMCG;
H02: There is significant positive correlation between the personal beliefs/evaluation and the overall purchase attitude of the Consumer towards durables and FMCG;
H03: There is significant positive relationship between the overall purchase attitude and PBC of the Consumer towards Durables and FMCG;
H04: There is significant positive correlation between the overall purchase attitude and social aspects on the consumer towards durables and FMCG;
H05: There is no significant correlation between the overall purchase attitude and attitude functions of consumer towards durables and FMCG.

RESEARCH METHODOLOGY

(1) Sample, Tool and Procedure: Descriptive exploratory Research on consumer attitude/preference on qualitative variables undertaken herein vide Primary market survey method. The attitude objects contrasted are of two classes: the white durable goods for household and FMCG like personal body care items for family like Soaps/Shampoo/Hair Oil/Cream/Spray/Talcum powder/Toothpaste/Polish/medicine. The disparate product classes were chosen as objects;
(2) Sampling Design: The Consumer Survey was conducted on a targeted sample of 450 family units drawn from a population of over 1lakh HHs in Kochi metro. A total of 300 numbers of filled questionnaires/responses were obtained despite protracted effort in the field survey which is nearly adequate at 90-95% confidence interval, with a max error likely at 3.95%. Thus a response of 66.6% of the targeted family units responded fully (300 numbers) –response rate, the survey spanning over an year (Jan-Dec 2011);
(3) Sampling Method: The sample size of 300 Households (HHs) was chosen from a population of 5 lakhs and overall one lakh HHs settlements in Kochi (Metro). Stratified random sampling based on income and geographical spread in 20 locations of the Kochi metro applied to select the social middle class homogenous sample households strata in the Urban areas of Kochi on a proportional basis of income and population. A pilot study was conducted earlier in the beginning of year 2011, on 30 middle class households which were used to sharpen the efficacy of the questions for the survey. The Cronbach alpha for reliability found to be high enough well, beyond acceptance limit of 0.65;
(4) Method of Data Collection: Survey method of primary data collection using Combined Interview and structured questionnaire (7 point S.D Scale statements) for data collection with attitude object stated vide above.

ANALYSIS/FINDINGS

The personal characteristics of the respondents (Career woman) have been analyzed as hereunder. The maximum age range of husbands was 40-50 years while the same for housewives were 30-40 yrs. 80% of households had only 2-4 members. The education level of husbands was maximum in the Professional level

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(35%) and among Housewives, Graduation level (50%). Almost 90% and 82.67% of the husbands & Housewives respectively of the sample population were employed in Govt. / Pvt. Sector. The average annual income of 5.82% of the HHs were in the range of Rs.16-20Lakh, while the annual income of 60.1% of the households were in the range Rs.12-16Lakhs and for the HHs with the annual income of Rs.8-12 Lakhs was 25.46 percent ;the annual income of Rs.4-8Lakhs accounted for 5.54%HHs and the lowest income bracket of less than Rs.4Lakhs were 3.08% of the Sample HHs. In 79.67% households, wives made the lead decisions on the purchase of goods for family and self help (no servant) has been practiced in the kitchens of 61% of households, usually working housewives. The average age of person handling White good durables like Refrigerator/MWO/Induction cooktop/LPG Hob/Grinder-Mixer-Juicer ranged between 24-50 years (82.67%) with mostly twice a day cooking schedule (71%) . The surveyed sample population covered 82.67% as Kerala resident and 12.67% were South Indian (non-Keralite) with 4.67% accounting for North Indians residing in Kochi. Invariably Refrigerator, MWO, LPG Cook Stove, Wet Grinder/Mixer/Induction Cooktop/OTG are currently used per almost all middle class households sampled. The major problems faced in kitchenware durables were parts failure (39.33%), subsequent wear & Tear (29.67%) and handling damage (24%). 60% of the sample population opined that time saving is the striking advantage while 44.67% indicated fuel saving and 19.33% opted for ease of cleaning/operation. Regarding attributes influencing new purchase of Kitchen durables based on product attributes, 12 numbers of salient attributes were identified as- Product quality/technology /performance(23%), after sales service quality/Warrantee (13%), Economy-energy saving in operation(11%), Automatic unique features (9%), Brand reputation (8%), Design/style/color/ appearance/status symbol(7%),availability(6%), Convenience of handling/user friendly/sizing/ease of cleaning & use(6%), Price(5%), Past experience(4%), Safety of operation(4%) and payment terms/discounts/patronage benefits(4%).In general, for the body care FMCG , the 12 numbers of salient attributes were reported as-Premium quality, Brand credibility, Value for money ,innovative technology, safety/body friendliness/medical endorsement, availability, patronage benefits – benefits/coupons/offers/gifts for bulk or regular purchases/revolving monthly credit /free extra quantity enjoyed with retailor (POP), packaging attractiveness for convenient weight/Lot size, Validity for usage/shelf life expiry dates, taste/flavor/ Aroma /texture-smoothness strength - efficacy, Peer/Social conformity and price. The frequency of repeat purchase of durables was an average more than 10 years while that of FMCG for personal body care was as and when the stock depleted in the family/reserve .For the household purchase decisions ,the social/others influence was as follows:39.01% were influenced by Family members,17.85% influenced by friends,15.93%influenced by close relatives,14.01% influenced by colleagues/peers,12.08%influenced by neighbours and 1.12% influenced by others like salesmen. The mass media as a communication source influenced the household attitude for durables as follows:32.77% are influenced through TV Ads-celebrity endorsements,25.11% are influenced through newspaper Ads,17.02% through Ads/review in popular household magazines,16.17% through the WWW(Internet)Web sites/E shopping sites, 5.1 % through Retailer/Dealer network exhibitions/pamphlets and 3.83% through hoardings/LCD TV Ads in street corners & shopping malls. Interestingly, there is little influence through Radio on the urban households. However for the FMCG the source of information for purchase was observed to be : TV (98.5%),Radio(1.2%),Retail outlets-salesman(20.1%), Print media newspapers (13.6%), Magazines (1.2%), Hoardings (5.8%), friends-relatives(11.8%) and internet-(22.9%). Regarding the quality of the after sales complaint management-spares services support received on branded durables for the households: only 17.45%rated the services as excellent, while 69.78% rated the aftercare services as good, and 9.79% rated the services as satisfactory and 2.98% rated them as bad (complaints).The likelihood of repeat purchase of existing ownership of brands (brand loyalty)in durables in households has been indicated as: Most likely(46.12%),More Likely (17.62%) ,Less likely (12.03%),Unlikely (7.28) and the Undecided(16.95%).With respect to the *final purchase conflict resolver*-decision maker in the family for purchase of durables/FMCG: In 56.17% households, the conflict resolver in the household was jointly by involvement of most of the members, while in 33.19% households the husband resolved the purchase conflicts ,in 5.53% households only the wife was the conflict resolver, in 2.98% cases the kids were the conflict resolver for purchase decision making and only 2.12% households were strongly influenced by parents/In laws. On the sales promotion preference front, the household attraction towards the various modes of sales promotion schemes available in the market for the brands/marketers of durables has been as below :majority chose Advertisements (44.32%),Celebrity endorsement (22.45%), Hoardings/ Banners/Posters –Flex boards(19.87%) and others like dealer gifts/discounts offer /pamphlets(13.36%). In contrast, for the Personal care FMCG ,the relative influence on attitude has been advertisement (19.1%), Pricing (15.4%),excellent quality (38.6), influence of friends-relatives-peers(6.2%),retail outlet-salesman/girls (16.6%) and others/internet(3.2%).The purchase behavior adopted by the households for durables are broadly observed as: Habit-routine style adopted by 7.87%, Limited problem solving style adopted by 19.21%, Extensive problem solving style adopted by the majority (38.35%) and Variety/choice seeking style by 34.57% of the households sampled. For the Personal care FMCG the attitude of the respondents has been based on benefits seeking and the purchase style has been of convenience/habitual or impulsive as per situations with very limited analysis or information search process before purchase and complying blindly with peer pressure/social comparison. Often when price discounts were available, bulk purchases reported based on shelf life/expiry dates of the product. The overall purchase attitude towards the durables/FMCG by the respondents of households has been a clear majority of favourable (62.14%), Unfavourable (14.58%), Neutral / ambivalent (13.68%) and a minority of Can't tell/ Undecided (9.67%) in the sample. In the case of durables, respondents often engaged in extensive information search through WOM and valued products based on their personal importance and financial value with constraint of affordability and matching the family size-FLCS needs, yet matching the overall family lifestyle and consumption pattern. Like FMCG for the durables also the respondents accorded top importance for Product attributes and benefit seeking behavior with strong preference for leading proven brands to avoid risk as also higher social motivation to comply. The involvement in the purchase process was reported as substantially higher for the durables (86%) in view of the higher financial investment involved. 68% of the respondents live in owned house/apartment while 32% lived in rented house/apartments/quarters in the urban habitat. The highest priority for the respondents were the family welfare(26%),money/investments (23%),children's education(21%), healthcare of parents/kids (16%), socialization/recreation/shopping(9%) and other pursuits(5%).There is very little brand loyalty evidenced in FMCG as well as in White goods.

Factor analysis done on Attitude function adopted. Regarding the attitude function for durables, Statements A1(benefits) and A3 (diversion from boredom, saving of time) cause the highest percent of total variance of Utilitarian factor at 9.875.Statements A1-5 account for the utilitarian function of the consumer attitude. B2-3 of the Knowledge function of attitude has highest mean value for curiosity and actualization needs with high percent of relative variance 8.917.C1, C4 and C5 account for relatively higher mean among attitude functions under epistemic head. Achievement, ambition- growth and self esteem leading to high percent total variance 7.474 of Value expressive function of attitude.D5,.4,1 have the highest mean explaining 7.613 per cent of total variance .On the whole the utilitarian and epistemic functions of attitude relatively more predominant in order for white goods purchase .More than one function of attitude plays their role in the overall purchase attitude as well. The time pressure of working women are reflected in the utilitarian function dominating in the overall attitude and decision making on the purchase of white goods, given their higher buying power among MC.(KMO Value:0.738 ; PCA with Varimax orthogonal rotation applied.) ; However for the attitude function for FMCG purchase, the value expressive function accounts for the highest total percent of variance at 9.843,with C2 (psychogenic) and C3 (leadership) as most dominant. The ego defensive/social function being the next dominant function of attitude with percent total variance of 9.741 having statements reflecting strong social approval. The utilitarian function and knowledge functions are relatively less important in FMCG purchase from above. In contrast, for the lower Income HHs, brand loyalty to avoid risk, security conscious purchasing, price is most important in view of their relatively limited resources and higher family size evidenced in the survey. All the attitude functions are interactively influencing the purchase attitude of the consumers for both durables as well as FMCG for the HH use. For FMCG ,as stated earlier, consumers accord top ranking for Quality and price followed by other attributes like fragrance, packaging/brand name/Colour/Continual patronage benefits with retailor etc(KMO Value:0.743 ; PCA with Varimax orthogonal rotation applied)

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TABLE 1: INNOVATIVE PURCHASE ATTITUDE /LIFESTYLE PRODUCTS ACCEPTANCE LEVEL FOR CONSUMERS BASED ON INCOME LEVEL FOR DURABLES/FMCG

Type of Consumer class/HH of Sample	White durables (% of Sample size)	Personal body care FMCG (% of Sample size)	Urban Lifestyle Category type & Income and % HH observed in the Sample				
			Lifestyle	Disposable monthly Income (Rs.)	% of sample	Annual Income (Rs.)	% of sample
Innovative/Creative/High risk takers Actualizer/Global	4.41	2.77	V. High Income Affluent	>=1 Lakh	8.45	16-20Lakhs	5.82
Earliest adoption of technology products Achiever	17.62	10.56	Well Off-Upper Middle class	0.5-1 Lakh	57.21	12-16Lakhs	60.1
Earliest majority Striver/Seeker	29.64	26.88	Climbers-True Middle class	0.25-0.50 Lakh	24.74	8-12 Lakhs	25.46
Late majority Struggler	37.76	33.52	Aspirants-Lower Middle class	.05-.25Lakh	6.83	4-8Lakhs	5.54
Laggards-Last adoption of products	10.57	26.27	Deprived- V. Low Income	<0.05Lakh	2.77	<Lakhs	3.08
Total(%)	100	100			100	100	

The majority are in the monthly disposable income bracket of Rs.0.5-1 Lakh and annual income of Rs.12-16 Lakh. The very high and very low income HHs under disposable monthly segments account for a total of 11.22% of the total sample. The middle class is however focused in this study. The influence on income category on attitude function is beyond scope of this study as multiple attitude functions play up in the attitude for both durables and FNCG in a complex manner with the hierarchy of needs as per the income class. However generally it is felt that the lower two income categories vide above are highly security oriented,self centered ,family based, more emotional (less rational) with short term goals and benefits exhibited in purchase attitude and decision making. However in contrast, the middle class(middle two segments) accounting for the majority of the consumers in the market are found to be futuristic with long term calculated goals, more rational, risk taking, savings oriented, lifestyle driven, children grooming, highly involved avail greater choice/variety and information search/analysis, self confident and status conscious seeking respect from society. In their attitude for purchase of durables and FMCG. Consumers in both durables and FMCG are found to be not very price sensitive in the current market scenario at Kochi; rather they value the product benefits as per affordability, though income is not found to be influencing the purchases in both categories of products. Hence the product attribute based benefits as per the needs-attitude functions as assessed above assume greater importance than the buying power of the consumer to arrive at the Price Value equation. Nonetheless, there do exist attitudinal preference between the various income segments .Viz.,the higher income groups (Well off / upper middle class)accord most importance to the salient attributes of the product and relatively less concerned with the brand name and willing to pay higher price. They have a refined taste, look for intangible attributes, patronage benefits as also the aesthetics of the products in both categories despite their huge purchasing capacity. In the case of the mid segment (true middle class)of the income groups ,the significance of product attribute is most relevant (utility value)as also the brand name is better valued as also price sensitive in view of the family size and lifestyle demands from members of the family.

TABLE 2

Consumer Purchase decision making Enablers through Attitude function	For Durables (in %)			For FMCG (in %)		
	+ High	Neutral	-Low	+ High	Neutral	-Low
Cognitive beliefs on Product benefits /Perceived usefulness/ease of use	81.22	1.15	17.63	74.25	7.49	18.26
Affective/Feelings on Product	29.11	9.02	61.87	58.47	22.61	18.92
Attitude towards purchase	64.9	9.96	25.14	19.73	75.06	5.21
Subjective Norms /Social Influence	87.93	5.75	6.32	88.45	6.57	4.98
PBC/Perceived risk/ Importance /Involvement level	85.63	9.39	4.98	72.56	21.91	5.53
Behavioral Intention	77.78	2.68	19.54	85.36	9.82	4.82
Personal characteristics-demographic aspects	78.16	12.26	9.58	86.15	11.47	2.38
Lifestyle and personality/Self Image	81.41	9.97	8.62	88.76	10.22	1.02
Sub Cultural/Religious beliefs/Social norms/Food habits/Nativity	37.93	18.01	44.06	24.75	16.99	58.26
Family dynamics	88.31	4.80	6.89	91.62	6.86	1.52
Mass media- Persuasion and Situational Influences	64.37	2.29	33.34	81.49	17.25	1.26
Past behavior/Cognitive dissonance	39.84	57.10	3.06	23.78	23.81	52.41

The family dynamics, social norms, PBC, beliefs on product benefits, lifestyle/self image of the consumer were prominent in influencing the attitude for durables, while for the FMCG, Family dynamics, lifestyle/self image, demographic personal profile, social norms, behavior intention to buy and situational marketing persuasion influenced the consumer in more discernable manner. The Past experience, sub cultural aspects, affect/feelings observed to have relatively lesser impact for both durables and FMCG.

HYPOTHESIS TESTING

H01: There exist significant positive correlation between the income of Consumer and the overall purchase attitude towards durable goods and FMCG;

H02: There is significant positive correlation between the personal beliefs/evaluation and the overall purchase attitude of the Consumer towards durables and FMCG;

H03: There is significant positive relationship between the overall purchase attitude and PBC of the Consumer towards Durables and FMCG;

H04: There is significant positive correlation between the overall purchase attitude and social aspects on the consumer towards durables and FMCG;

H05: There is no significant correlation between the overall purchase attitude and attitude functions of consumer towards durables and FMCG.

TABLE 3: DEPENDENT VARIABLE: (A) OVERALL PURCHASE ATTITUDE TOWARDS DURABLES AND FMCG.

Independent Variables	T Value	Sig.	P<	H0 S/NS
Income of HH (I)	- 0.158	1.774	0.01	NS ; H01 rejected
Personal Beliefs/evaluation(BE)	0.188	3.121	0.01	S;H02 accepted
Perceived behavioral control-confidence-involvement-importance of purchase (PBC)	0.343	3.866	0.01	S;H03 accepted
Social aspects of Consumer(SN)	0.460	5.812	0.01	S;H04 accepted
Attitude functions(AF)	0.364	4.106	0.01	S;H04 accepted
F value=28.964 k1=2.069	R 2=0.426	2.928	0.01 0.01	Variance=0.3572 Significant.

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Regression equation can be put up with regression weights as

Overall purchase attitude , A =z0+z1(I)+z2(BE)+Z3(PBC)+z4(SN)+z5(AF)+k1.

Where   z1=-0.158;z2=0.188;z3=0.343;z4=0.460;z5=0.244;k1=2.069.(Model)

Income obviously has negative influence while the SN,AF and PBC are most dominant in the regression equation as independent variables .

LIMITATIONS/CONSTRAINTS

The sample population considered was mainly consumers residing in the urban areas of Kochi. The answers of the questionnaire depend upon the belief of customers, which may differ from the reality; the survey was conducted considering the time &space constraint ,indirect measures relied upon for attitude measurement. The study being based on the assumptions that the customers gave correct information and undertook reasoned action, as per TPB and use as per TAM.

CONCLUSION

This study of consumer behaviour contrasting the various attributes of modern durable products and FMCG has outlined the various facets of consumer likes/ dislikes -attitude and the role of attitude functions. The impact of various factors on the consumer attitude has been brought out by regression as well. In many ways the attitude towards the durables (White goods) and the FMCG are tangential, though in specific manner the attitude functions differ as well. Multiple attitude functions are seen to moderate the overall attitude towards the product/act. Notably, the income of the consumer does not influence the consumer attitude positively or significantly. This study can be extended to rural areas of Kochi as well .Marketing strategy on product positioning, targeting, product improvements, brand enrichment could be undertaken by marketers to generate higher profits/ corner better market share/ increased Sales volume and to satisfy the dynamic global lifestyle/ consumption patterns of the modern middle class urban consumers, like the career woman, the most influential person in middle class HHs .

ABBREVIATIONS USED

TPB: Theory of planned behavior

TAM: Technology a acceptance model

WWF: Working wife family

SN: Subjective norms

PBC: Perceived behavior control

FMCG: Fast moving consumer goods

BI: Behavioral Intention

HH: Household

FLCS: Family Lifecycle stage

MWO: Microwave oven

OTG: Oven grill toaste

LPG: Liquified petroleum gas

ELM: Elaboration likelihood model

KMO: Kaiser Meyer Olkin measure of sampling

PCA: Principal component analysis

AF: Attitude function

POP: Point of purchase

OEM: Original equipment manufacturer

MC: Middle class consumer

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A STUDY OF CONFLICT MANAGEMENT STYLES USED BY MBA FACULTY TO ADDRESS CLASSROOM CONFLICTS

PADMA S RAO
RESEARCH SCHOLAR
BHARATHIAR UNIVERSITY
COIMBATORE

ABSTRACT

Classroom conflicts are very common and unresolved conflicts affect the educational outcomes. It also affects emotional well being of students and faculty. Faculty members should learn the necessary skills to manage the conflicts. Use of appropriate conflict management style by faculty members results in effective management of the classroom conflicts and in turn helps to create responsive classrooms. This study has been done to find out the most preferred style of faculty members while dealing with classroom conflicts. Different conflict situations have been focused. Sample size for this study was 83 MBA faculty members working in engineering colleges affiliated to Visveswaraya Technological University (VTU) located in Bangalore, Karnataka. Data was collected through conflict management inventory. Hypothesis was tested using paired t- test. Collaborating style was found to be the most preferred conflict management style for the faculty members while dealing with classroom conflicts.

KEYWORDS

Conflicts, Classroom conflicts, Conflict Management Styles, MBA Faculty, Collaborating style.

INTRODUCTION

All Colleges face the major challenge of bringing out graduates with up-to-date knowledge and skills to match the current needs of employers. Teachers play a vital role in the overall development of the students. Disagreements and frictions are common even in classrooms. Teachers and students spend nearly three-fourths of their day time in the college and therefore classroom environment plays a major role as far as emotional well being of teachers and students are concerned.

Classrooms are social settings in which faculty and students interact with each other in the process of teaching/learning. "*Acharya Devo Bhava*" was the mantra during the days of "*Guru-Shishya parampara*". Attitude, mentality and outlook of present generation students are totally different from that of students in the past. Disagreements regarding several issues may lead to inter-personal conflicts between students and faculty members. Unresolved conflicts may affect optimum performance of students as well as faculty members and thereby adversely affect their emotional well being.

THEORETICAL CONCEPTS

Before going into the issue of classroom conflicts, it is desirable to understand the definition, types of conflicts and styles of conflict management.

WHAT IS A CONFLICT?

Conflict is a universal phenomenon. Conflict exists among individuals, with in groups and organisations. In general; conflicts arise due to competition, differences in values, attitudes, experiences, goals and perception of limited resources. Individuals differ in their attitudes, personality, values, ideologies, opinions. Therefore conflicts are unavoidable and cannot be eliminated. According to Landau "Conflict exists in all human relationships: it always has and probably always will."

Conflicts can be considered as an expression of negative attitudes, hostility, antagonism, aggression, rivalry, and misunderstanding by opposing parties. It is associated with situations that involve contradictory or irrevocable interests between two opposing individuals or groups.

CLASSROOM CONFLICTS

Classroom conflict is considered to be a form of incivility. Patrick Morrissette (2001) defines it as "the intentional behavior of students to disrupt and interfere with the teaching and learning process of others" According to him, conflicts can manifest itself among various parties: "student versus teacher" or "student versus student" or even "class versus teacher". These conflicts may include students challenging the instructor's authority or knowledge through questioning, deliberately disrupting the classroom by engaging in side conversations, coming chronically late to the class, passing comments.

CONFLICT MANAGEMENT STYLES

Conflict management involves the use of appropriate strategies to minimise the negative outcomes and increase the positive outcomes of the conflicts. Five different styles have been identified by the researchers in order to manage the conflicts.

1. COLLABORATING STYLE

This is also known as problem solving or integrating style. It is a style that is high on both assertiveness and cooperativeness and the outcome is "win-win". People preferring to use collaborative style face the conflict directly and try to meet the needs and expectations of all people involved. When parties to the conflict are interested in long term and continued relationship and concern of both parties have to be met to the maximum possible extent, they decide to collaborate. These people can be highly assertive but unlike the competitor, they cooperate effectively and acknowledge that everyone is important. Collaboration requires open, trusting behavior and sharing information for the benefit of both the parties.

2. COMPETING STYLE

People who prefer to use competitive style are very assertive, exercise power which they derive from position and try to satisfy their personal needs under all circumstances. This style can be useful when there is an emergency and a decision has to be taken quickly. There is an increased chance that losing parties will suffer by the outcomes of the conflict. If individuals in long-term relationships practice competitive conflict management style, the relationship suffers.

3. COMPROMISING STYLE

The compromising mode has moderate assertiveness and moderate cooperation. In compromising style, there is no clear winner or loser. People who prefer to use compromising style try to find a solution that will partially satisfy everyone. It is a situation where both the parties to the conflict are ready to listen to each other and willing to come down from their initial expectations. Compromising strategy often harms the relationships. However, it can be used as a temporary solution when there is a time constraint.

4. ACCOMMODATING STYLE

This style is high on cooperativeness and low on assertiveness. This style indicates a willingness to meet the needs of others at the expense of the person's own needs. The person following this strategy is more interested in maintaining good relationships and thus puts other party's interest over and above his own. Accommodating style is appropriate when the issues matter more to the other party and when peace is more valuable than winning. People may try to take advantage and accommodating persons tend to get frustrated often.

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5. AVOIDING STYLE

This style is low on assertiveness and cooperativeness. It is a deliberate decision to take no action and not to react or stay out of conflict. People who prefer to use this style seek to evade the conflict entirely. This style is characterized by delegating controversial issues to subordinates to make decisions, accepting default decisions, and not wanting to hurt anyone's feelings. It can be appropriate when victory is impossible, when the controversy is trivial, or when someone else is in a better position to solve the problem. However in many situations this is a weak and ineffective approach to take. In certain situations this style may be appropriate. When both the parties are angry and need time to cool down, it may be best to use this style. But over use of this style leads to negative evaluation and criticism from others in the work place.

REVIEW OF LITERATURE

In the words of Boice (2001) "no experience of new faculty as teachers, is as dramatic and traumatizing as facing unruly, uninvolved students". In fact, interpersonal conflicts in college classrooms are common, disruptive, and significantly affect how faculty and students feel about a particular course. Some forms of conflict are hostile and overt (Goss, 1999). Students may disparage the instructor; argue with classmates, or actively dispute course requirements and their grades. Other conflicts stem from students' inattentiveness and appear more passive, such as students arriving chronically late to class, engaging in side conversations, or acting apathetic and bored (Appleby, 1990; Kearney & Plax, 1992)

Uzma Mukhtar, Zohurul Islam and Sununta   conducted an exploratory   study involving some selected public universities in Pakistan to highlight the natue of conflicts among students and faculty and to identify its consequences on the organizational outcomes. The sample size for this study was 202. The researchers concluded that conflict had an effect on the quality of education which was directly related to human resource potential development of the country

Britta K, Morris-Rothschild and Marla R. Brassard (2006) in their research article concluded that CMEFF and years teaching had positive, significant effects on use of integrating and compromising strategies, while avoidance had negative effects on both and anxiety on integrating strategies. Teachers (N =283) from eleven schools (seven elementary), largely female and white participated in the study.

Steven A. Meyers, et al (2006) conducted a descriptive research on the nature and correlates of classroom conflict using a national sample of 226 faculty members. They differentiated two different types of conflict, inattentive versus hostile. They concluded that levels of conflict were not associated with instructors' demographic traits or characteristics of their courses, but were related to professors' choice of teaching methods, their demeanor, and how they responded to challenging situations. They also found that those conflict management techniques that address the relationship between faculty and students were most effective in reducing conflict.

Bartlett M E (2009) examined the conflict management styles and perceived levels of workplace incivility of community college senior level administrators in the nine mega-states. Findings indicated that community college senior-level administrators preferred to use integrating conflict management style, followed by obliging, avoiding, compromising and dominating. Further, participants reported a perceived low level of workplace incivility.

STATEMENT OF THE PROBLEM

Present generation students have easy access to information on any subject/topic. Many management colleges have provided internet access to students through Wi-Fi in the campus. Internet provides easy access to online journals, slides, text books, podcasts, video lectures. So students' expectations   from the faculty members are entirely different from what it used to be earlier. Therefore, the present generation teachers are under tremendous pressure to meet the expectations of students and create responsive class rooms. As a result, they have to design new methods and consequent pedagogies for ensuring collaborative learning.

When teachers do not meet the expectations of students, students tend to become inattentive, engage in side conversations, use lap tops, mobiles or create disturbances in the class. On the other hand, teachers expect students to be punctual, attentive, actively participate in classroom activities and show interest & initiative in learning.

Students often think that internal assessment marks reflects their performance in the test. But they fail to appreciate the fact that it also depends on participation & performance in activities like presentations, group discussions, timely submission of assignments etc. Any of these issues may be a source of conflict between faculty members and students. Failure to recognise and address these conflicts may adversely affect the learning atmosphere in management colleges.

Teachers have to learn the techniques to deal with conflicts that are likely to arise in classrooms.. Research studies making detailed and critical investigation in the area of management of classroom conflicts from an empirical perspective are lacking in literature. In recognition of these concerns, the current study entitled

"Study of conflict management styles used by MBA faculty to address classroom conflicts" was conducted.

THE FOLLOWING THREE CONFLICT SITUATIONS WERE FOCUSED:

1. NON- ADHERENCE TO CLASSROOM BEHAVIOURAL NORMS BY THE STUDENTS

Conflicts arise from students' inattentiveness, arriving chronically late to class, engaging in side conversations, using mobile phones, non submission or delayed submission of assignments, using lap tops during class hours.

2. TEST MARKS

Students often actively dispute their marks in internal assessment. Faculty-students conflict also occurs for out of syllabus questions that appear in the tests and scoring pattern adopted by the teacher.

3. PERCEIVED TEACHING DEFICITS

Teachers use different methods while teaching. Most common methods employed are lecturing, asking the students to give presentations, giving assignments, unpreparedness of faculty, lack of in-depth knowledge, ineffective communication etc. Students may become inattentive in the class giving rise to conflicts.

OBJECTIVES OF THE STUDY

The main objectives of the study were

1.   To find out the most preferred conflict management style of MBA faculty members in different conflict situations in classrooms.
2.   To find out the least preferred conflict management style of MBA faculty members in different conflict situations in classrooms.
3.   To offer suitable suggestions based on the findings of the study.

HYPOTHESIS

The following null hypothesis was formulated to find out the most preferred conflict management style.

H_0: Faculty members did not have any preference to use collaborating style over avoiding style in all three conflict situations

RESEARCH METHODOLOGY

Sample for this study was 83 MBA faculty members of   colleges affiliated to Visveswaraya Technological University, Belgaum, and Karnataka. Data was collected through questionnaire. Self-abridged version of Reginald Adkins' conflict management style inventory was used to collect information from respondents. The original   conflict management style inventory consisted of 15 questions on a scale of 1-4. Since this study focused on specific conflict situations, one statement was used for each conflict management style to minimise confusion and also to obtain appropriate response in each of the conflict situations.

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DATA ANALYSIS

Mean scores of each of the conflict management styles in all the three situations were found out and highest mean score in each situation represented the most preferred conflict management style of faculty. The lowest mean score represented least preferred conflict management style for faculty members.
The results are depicted in Table Nos. 1&2.

TABLE NO.1: THE MEAN SCORES OF CONFLICT MANAGEMENT STYLES IN DIFFERENT CONFLICT SITUATIONS

CMS / Situations	Collaborating style	Competing style	Compromising style	Accommodating style	Avoiding style
Non adherence to Classroom behavioural norms	3.17	2.92	2.56	2.86	2.18
Disagreement with Test Marks/grades	3.12	2.86	2.54	2.23	2.26
Perceived Teaching deficits	3.13	2.82	2.84	3.33	2.129

TABLE NO.2: RANKING CONFLICT MANAGEMENT STYLES IN DIFFERENT CONFLICT SITUATIONS

Non adherence to Classroom behavioural norms	Disagreement with test marks	Perceived Teaching deficits
Collaborating style	Collaborating style	Collaborating style
Competing style	Competing style	Accommodating style
Accommodating style	Compromising style	Compromising style
Compromising style	Accommodating style	Competing style
Avoiding style	Avoiding style	Avoiding style

TESTING OF HYPOTHESIS

The null hypothesis was tested using paired t-test using free on line t test calculator. The results of t test are tabulated in Table No.3

TABLE NO. 3: t -TEST RESULTS

Conflict management style	Non adherence to Classroom behavioural norms		Disagreement with test marks		Perceived Teaching deficits		T test value	Table value at 0.001 level of Significance, d f =82
	Mean N=83	SD	Mean N=83	SD	Mean N=83	SD	5.82	3.1926
Collaborating style	3.17	0.97	3.12	0.98	3.13	1	6.43	3.1926
Avoiding style	2.18	1.14	2.26	1.20	2.12	1.11	3.38	3.1926

Since the calculated t value was more than table value in all the three conflict situations, null hypothesis was rejected and it was concluded that most preferred style for faculty members was collaborating style. Since the faculty members scored the least in avoiding style compared to other styles, avoiding style was the least preferred style for faculty members.

FINDINGS

1. The mean score was the highest for collaborating style in all the three conflict situations addressed in this study. This showed that MBA faculty preferred to use collaborating style in all conflict situations addressed in this study.
2. The second highest score for a style was taken as back -up style. The back -up style was dependent on conflict situation. When the conflict was due to perceived teaching deficits, faculty preferred to use accommodating style. When the conflicts with students were due to disagreement with test marks and classroom behavioural norms, faculty preferred to use competing style as a back -up style.
3. Avoiding style was the least preferred style for MBA faculty members while addressing classroom conflicts in all situations.

DISCUSSION

The major outcome of this study is that faculty members have preferred to use collaborating style in all classroom conflict situations. The findings of the current study have corroborated with the findings of the study conducted by Bartlett M E (2009), Britta K. Morris- Rothschild (2006). Steven A. Meyers, et al (2006) in their study have also concluded that those conflict management techniques that address the relationship between faculty and students were most effective in reducing conflict. Collaborating style is considered to be an effective style of managing conflicts since it is high on assertiveness and cooperativeness and the outcome is "win-win". Therefore, people using collaborating style encourage interactions and try to meet the needs and expectations of all people involved. Of all the styles avoiding style is considered as a weak and ineffective approach to take. People tending to use this style try to stay out of conflict and withdraw from the situation. Faculty members in current study have shown least preference for this style in all situations. The findings of the current study with respect to avoiding style are in line with the findings of the study conducted by Britta K, Morris-Rothschild and Marla R. Brassard (2006).

SUGGESTIONS

In view of the importance of using appropriate style for managing the conflicts in the classrooms, workshops may be conducted in the colleges to improve conflict management skills of faculty members. Collaborating style is considered as an effective style to manage the conflicts successfully. To use collaborating style, faculty members need empathetic attitude, communication skills, assertion skills and listening skills. These days, emotional intelligence is considered as a work place skill. Emotional intelligence encompasses all the skills mentioned above. Therefore, colleges can conduct EI workshops for faculty members**.**

CONCLUSIONS

Collaborating style helps to meet the expectations of students since faculty members using collaborating style tend to be high on cooperativeness and encourage interaction, consider the views of students, listen to their grievances and show concern for solving the problems. This style helps the faculty members to resolve classroom conflicts successfully. Teaching and learning occur through social interaction between teachers and students. Effectiveness of teaching and learning depends on teacher-student relationships. Faculty members should be encouraged to use collaborating style to create responsive classroom. Responsive classrooms help to control deviant behaviour of students.

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THE DICHOTOMY BETWEEN CORPORATE CRIMINAL LIABILITY AND DIRECTORS' INDIVIDUAL CRIMINAL LIABILITY: AN APPRAISAL OF TWO JURISDICTIONS (THE PEOPLE'S REPUBLIC OF CHINA & UNITED KINGDOM) VIS-A-VIS THE SCENARIO IN INDIA

ABHISHEK TRIPATHY
STUDENT
KIIT SCHOOL OF LAW
KIIT UNIVERSITY
INDIA

ABSTRACT

A "responsible corporate citizen" has become a catchphrase amid heated debates on corporate social responsibility in recent times. As many cases have shown, irresponsible corporate practices can plunge a company into a downward spiral of distrust by the community at large, which undermines confidence in the company and ultimately hurts the company itself. Legitimacy may be maintained – at least to some extent by holding someone accountable to the offended publics. The questions become: who can be held responsible and for what should they be held responsible? Therefore, the objective of this research is to describe, analyze and appreciate the legal regimes governing the duality of directors' liability vis-à-vis that of the corporate for corporate faults across different jurisdictions. And for the purposes for this research subject-matter, three jurisdictions have been reviewed and analyzed and an appraisal to that effect has been attempted, i.e., The People's Republic of China, United Kingdom and India. The research shows that Indian legislation needs to draw level with the other jurisdictions in relation to strengthening its legal responsibility wherein the company can be arraigned as an accused separately for the offences it is capable of committing. To be able to prosecute such conglomerates of wealth and power, a system, succinct and sound in law, has to be adopted to that effect. Laws drafted with the purpose of holding the offender liable for the offences committed should not have major exceptions as in the nature of immunity which these corporations are afforded.

KEYWORDS
Corporate, Criminal, Director, Individual, Liability.

INTRODUCTION

Corporate Crime is usually studied as the economic product of a free market society. The centrality of corporations to market capitalisms cannot be overestimated. They are everywhere. For centuries, the corporation has been the preferred vehicle for investment and economic development. A "responsible corporate citizen" has become a catchphrase amid heated debates on corporate social responsibility in recent times. As many cases have shown, irresponsible corporate practices can plunge a company into a downward spiral of distrust by the community at large, which undermines confidence in the company and ultimately hurts the company itself. A corporation is the very opposite of the atomized self-seeking individual posited by Adam Smith as the fulcrum of his idealized economy. Corporations are associations – collectives bringing assets and people together under one legal umbrella. The synergy of capital and coordinated human activities is what makes them as efficient as organisations dedicated to the generation of wealth.

If the means to achieve the end, if the ways in which profits are pursued come to be called in question because corporate conduct and/or its outcomes offend, legitimacy may be maintained – at least to some extent by holding someone accountable to the offended publics. The questions become: who can be held responsible and for what should they be held responsible?

Such questions have plagued researchers, scholars and policy makers ever since it has been acknowledged that associations of one kind or another are integral to social organization. In 1897, Ernst Freund observed that, from time immemorial, the group of persons who had come together for a common purpose was instinctively perceived as having rights that did not belong to individual members of the group.

The capacity of a corporation to exercise its rights and to fulfill its duties stems from its self-standing reality. How then should an association's/corporation's liability be determined? Should there be different kinds of rights and duties for associations than for human beings? John Dewey once opined that, *[t]he fact of the case is that there is no clear cut line, logical or practical, through the different theories, which have been advanced in behalf of the 'real' personality of either 'natural' or associated persons.*

This gives decision-makers room to manoeuvre when, as judges, they have to decide whether or not liability attaches to a corporate body or to some or all of the human actors within the association and when, as policy-makers, they have to determine the best way to attain public goals by providing corporate actors with appropriate incentives and disincentives. If one was to trace the evolution of English corporate criminal law development, then great reliance can be laid on a case, as early as 1846. Here, the Court added to a speciously reasoned doctrine the judiciary already had developed to hold corporations responsible in their own right. It had been decided that corporations could be held responsible for omissions because this required neither an act, nor a thought, to be proved. This justified holding a corporation, a legal device not capable of acting or thinking, criminally responsible for offences that did not require the usual criminal elements to be proven. The court wanted to demonstrate that the corporations were not to be given *carte blanche*.

In recent times, the fact that a corporation, being merely a person in law only, and not a real one, can act only through its employee inevitably inherits an omnipresent bogey haunting every pronouncement – the ancillary and incidental liability of the directors. A delicate balance has to be sought between the liability of company and that of its directors. The directors of a company are considered the limbs of that company. Directors, like all other individuals within and without the corporation, always have been personally for their own conduct, but this has been questioned on occasion. The notion is that for a corporation to think and act, some people have to do that thinking and acting, and when this occurs, there may be an argument that these human beings are not acting on their own identities but as the corporation. Thus, it has been understood that a contract entered into on behalf of the corporation by its directors, is a contract between the corporation and the third party. In this sense, directors like shareholders, are enveloped with a corporate veil around their actions. The vexing issue is whether directors and other officers and agents of the corporation, who, while acting in a non-contractual setting on behalf of the corporation, inflict harms on others, should be entitled to claim the protection of that veil, making the corporation the sole person responsible. So, should it follow that these thoughts and acts are not also the thoughts and acts of those corporate actors as human beings in their own capacity?

Although the corporate veil doctrine extended ordinarily only to the shareholders, courts in many jurisdictions extended similar immunity to corporate directors by means of parallel doctrines that directors' actions to the company if the directing minds and wills of the company act in their capacity as company directors. However, this immunity has receded to varying degrees in different jurisdictions as legislatures gradually recognized that the imposition of personal liability on directors for corporate faults can be resorted to, to control the behaviour and conduct of corporations.

Therefore, the objective of this research is to describe, analyze and appreciate the legal regimes governing the duality of directors' liability vis-à-vis that of the corporate for corporate faults across different jurisdictions. In an increasingly globalized economy, one might expect to find a growing convergence in this area of law. But this proves not to be the case, in many aspects. The particular significance of such a finding can be that there are many ways that the several dynamic economies can frame laws to influence the conduct of directors, and through that, the conduct of companies. This also invites further exploration into the political, economic, practical, legal and evolutionary factors that may explain the convergence and divergence of both statute law and judicial pronouncements/precedents/doctrines and the desirability and inevitability of one path over others.

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And for the purposes for this research subject-matter, three jurisdictions have been reviewed and analyzed and an appraisal to that effect has been attempted, i.e., The People's Republic of China, United Kingdom and India.

THE PEOPLE'S REPUBLIC OF CHINA

In canvassing and assessing directors' and corporation's liability under certain laws for corporate fault in China, it shall be expedient to first delve into China's existing and erstwhile economic framework and corporate composition and arrangement in brevity before exploring further as regards to the objective of this research.

A BRIEF BACKGROUND

In China, companies are established pursuant to the Company Law of the People's Republic of China (hereinafter "Company Law"), which was most recently amended by the National People's Congress in 2006. Companies are classified as:
▪   Limited Liability Companies or LLCs (analogous to private companies in some common law jurisdictions)
▪   Stock Limited Companies or SLCs (analogous to public companies under some common law jurisdiction)
Companies can also, by reference to the place of incorporation by the shareholders, be divided into:
▪   Foreign-invested Enterprises (where the shareholders include foreign legal persons)
▪   Domestic Companies (where all shareholders are Chinese legal persons)
Foreign-invested enterprises can be set up in the form of wholly foreign owned enterprises (WFOEs), where all shareholders are foreign entities; Sino-foreign equity joint venture companies (CJVs).

Special rules have been enacted with respect to corporate structure and corporate governance in relation to foreign-invested companies. However, the provisions of the Company Law concerning directors' liabilities are uniformly applicable to foreign-invested companies and domestic companies as well.

Since the reform and opening-up policy was adopted in 1978, the Chinese government has promoted the establishment of a "modern enterprise system" to transform the governance and operation of inefficient State-Owned Enterprises in a bid to propel the development of Chinese economy. Since this reform, China has experienced rapid economic development accompanied by a vast increase in the number of companies and growth in the scale of their operations.

However, the rapid development of China's market and companies has not been matched by an appropriate level and scope of regulation. The quality of corporate governance of companies remains a challenge and the impact of corporate activities on outsiders such as on the environment has been viewed quite negatively.

BOARD STRUCTURE AND COMPOSITION

Under the Chinese Company Law, a company is required to have a three-tiered corporate governance body, namely:
▪   The Shareholders
▪   The Board of Directors or an Executive Director, and
▪   A Board of Supervisors

The shareholders are the highest authority at a company and exercise their authority at shareholders' meetings. However, there are exceptions to this rule. Wholly State Owned Companies, EJVs and CJVs are not required to hold shareholders' meetings, in which case, the board of directors is the highest authority. The Company Law is silent on how often the shareholders of a company should meet to transact business in relation to LLCs. This is left to be set out in the articles of association of the company. SLCs are required to hold annual shareholders" meetings.

The Board of Directors or the Executive Director is the highest business-decision making body of a company. The Company Law grants certain statutory powers to the Board or to the Executive director. In theory, the statutory powers cannot be delegated to others, such as non-board members or third parties. Nonetheless, the resolutions of the Board can be overridden by a resolution of a shareholders' meeting, in which case, the matter will be returned to the Board for reconsideration. The Board of directors can be granted additional powers as set out in the Articles of Association of a company, there is no rule prohibiting any restriction of non-statutory powers.

The Board of Supervisors is the supervisory body responsible for monitoring the conduct of the directors and other senior managerial personnel. They have been conferred several powers under the Company Law as well. The Company Law also allows the Articles of Association to provide for additional powers to be granted to the Board of supervisors.

The Board of Directors must have a Chairman, who is elected by the shareholders or the board members in accordance with the Company Law and the Articles of Association. Chinese laws do not make any distinction between executive directors and non-executive directors. Listed companies must have at least one-third of the board consisting of independent directors. Chinese financial regulators also require certain financial institutions to have independent directors as well.

LIABILITY ISSUES

A.   Directors' Duties:

Under Chinese law, a director owes a duty of fidelity such is similar to the concept of fiduciary duty in some common law jurisdictions (hereinafter "Fiduciary Duty") and a duty of care to the company. There are certain acts which a director is prohibited from engaging in and those acts constitute the fiduciary duty of the director. Any gains thus made in the breach of such fiduciary duties are recoverable by the company.30 Chapter VI of the new revised Company Law (Amendment of 2006) refers to the 'Qualifications and Obligations of the Directors, Supervisors and Senior Managers of a Company'.

A director owes a duty of care to the company under the Company Law and the General Provisions of the Chinese Civil Code32, which is supplemented by the Torts Liability Law of the People's Republic of China, which is in effect from July 1st, 2010.

B.   Types of Liability:

There are three types of liability that can be imposed on directors, i.e., administrative sanctions, civil liability and criminal liability. Administrative sanctions are at present the dominant sanctions in enforcement. Administrative and civil liabilities are meant to deter, compensate or remedy certain unlawful activities whereas criminal penalties are mainly for punishment purposes.

Administrative sanctions may be imposed on directors by various regulatory bodies. As far as this aspect is concerned, the authorities which impose such liability are-
▪   China Securities Regulatory Commission (CSRC)
▪   Environmental Protection Authority (EPA)
▪   Labour Protection Agencies (MOLSS)
▪   Taxation Bureau
According to Article 8 of the *Law of the People's Republic of China on Administrative Penalty*, types of administrative penalty include:
▪   Disciplinary warning
▪   Fine
▪   Confiscation of Illegal gains or confiscation of unlawful property or things of value
▪   Ordering for suspension of production or business
▪   Temporary suspension or rescission of permit or temporary suspension or rescission of license
▪   Administrative detention

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▪ Others as prescribed by laws and administrative rules and regulations

Civil liability is one of the most important types of liability that can be used to protect the injured and restore justice. The first Company Law of 1993 only contained two relevant provisions: one was that a company in contravention of the law shall bear civil liability for compensation. The other was that where companies present false financial reports to shareholders and the public or make material omissions, the person in charge of the company or other persons directly responsible shall be fined between CNY 10, 000 and CNY 100, 000 and criminal charges shall be laid. The first Securities Law, 1998 states that a company is subject to civil liability if it engages in falsifying records, making misleading statements or material omissions which result in trading losses. The Supreme People's Court (SPC) has also stepped in provided interim provisions on civil remedies for false statements to alleviate investor anxiety about the market environment. The SPC Rules allow investors" actions against directors who have been administratively sanctioned or found liable in a criminal proceeding. Directors can be jointly liable to compensate investors with their companies for making false statements. According to the SPC Rules, persons involved in making false statements concerning securities face civil liability for the loss suffered by investors resulting from those statements. While the liability imposed on issuers, listed companies, promoters or controlling shareholders is strict liability, the liability imposed on others including directors is based on personal fault. Therefore responsible directors, supervisors, and managers of listed companies are jointly liable for investors" loss caused by false statements made by companies unless they can prove the non existence of fault on their part.

According to the amended Company Law, if the financial accounting reports and other such materials provided by a company to the competent departments in accordance with law contain false entries or conceal material facts, the person in charge and other directly responsible persons shall be fined between CNY 30, 000 and CNY 300, 000 by the competent department. This provision subjects directors who are in charge or otherwise directly responsible to an administrative fine.

The Criminal Law imposes criminal liability on directors involved in false statements but the penalties are quite light. While companies and enterprises (which are subject to obligations of information disclosure in accordance with the law) provide investors with a false accounting report or a report in which material information has been concealed, or fail to disclose other important information, hence seriously harm the interests of investors and others, the person in charge of the company or other persons directly responsible shall be subject up to three years imprisonment and/or CNY 20, 000 to CNY 200, 000 fine. It does not clearly define circumstances under which imprisonment and/or fines shall be imposed, which will give rise to enforcement difficulties.

Apart from the ones abovementioned, directors' liabilities for corporate fault in China are impliedly or expressly specified in certain other central legislations of China as well. Some of them which contain provisions in reference to directors' individual liability are the Environment Protection Law, 1989, the Labour Law, the Safe Protection Law, the Labour Contract Law, Occupational Health and Safety Regulation in the Mining Sector, Taxation Law, Enterprise Bankruptcy Law etc. Directors' liability for corporate fault is an under-developed area of law in China. While administrative sanctions have been extensively used with mixed effect, the criminal sanctions are only invoked in extremely serious cases. Civil liability remains weak and requires a much broader scope of application and detailed provisions on elements of liability and specific remedies.

'CORPORATE CRIME' AND CORPORATION AS A 'CRIMINAL' IN CHINA

Now that a succinct idea of directors' individual liabilities under various Chinese legislations for corporate fault can be ascertained, it is time to shift focus to an area of law which can be rightly termed as its alter-ego, i.e., the issue of corporate crime in the People's Republic of China and whether a corporation can be treated, punished and held liable as a criminal within its jurisdiction.

Corporate Crime is a new type of crime which is not clearly defined in China's legal statutes. Currently, "corporate crime" is still not clearly defined under China's criminal or civil laws. Under China's current legal definition, "company crime" generally describes and includes corporate crimes as the forms are similar in nature. Under China's Criminal Law Section 30, "when companies, corporations, firms, enterprises, or other forms of organizations commit harmful social behavior, under the law it is defined as company crime and therefore the organization must bear legal responsibilities and criminal liabilities.

China's corporate crime can be divided into the following categories:

▪ Start-Up Structural Corporate Crime
▪ Production-Operational Corporate Crime
▪ Unfair Competition in the Consumer Market
▪ Fiduciary and Security Fraud
▪ Organized Illegal Smuggling of Goods and Tax Evasion
▪ Corporate Fraud "

China's Criminal Law, Section 30, specifically defines a company or a corporation as a perpetrator of a crime as long as it is an enterprise or an organization, regardless of the type of ownership (state-owned, collectively-owned, or privately owned) or how it is organized (state-invested, collectively invested, or privately invested). It is defined as a single perpetrator of a crime under this definition and therefore can be prosecuted under the criminal law and receive criminal punishment. In China, both the individuals who are directly in charge of the corporation and the organization itself are charged as perpetrators of a corporate crime.

Monetary punishments and such pecuniary forms of economic retribution turn the crime around. The victims are compensated and perpetrators are punished as a result of the crime. As for amount of monetary fines, under China's Criminal Law, Section 52, they depend on the specific crime. There are three types of fines under the criminal law:

▪ Preset amounts
▪ Multiplied amount, and
▪ Unlimited amount

There are five ways of collecting these monetary fines in China:

▪ One-time full payment with a specific due date
▪ Multiple payment (e.g., monthly, yearly) with a specific due date
▪ Forced payment
▪ Anytime collection, and
▪ Reduced or forgiven payment

There are non-criminal punishments for corporate crimes as well apart from the criminal sanctions as discussed hereinabove. The administrative punishments meted out to the corporations are generally in the nature of warnings, confiscation of illegal gains and illegal goods, administrative monetary fines, forced stopped production, temporary cancellation of Licenses and Revocation of permits for operation, barred or forbidden participation, dissolving and disbanding the corporation, public rendering of a court verdict etc.

UNITED KINGDOM

A BRIEF BACKGROUND

The foundational principles which underpin the modern company, such as the doctrine of corporate personality, were laid down in the mid-nineteenth century through the enactment of the Joint Stock Companies Act, 1844, which introduced a regime of free incorporation by registration, followed by the availability of general limited liability in 1855, by the Limited Liability Act. Inevitably, it was not before the judges began framing the nature of the company as a juristic person. In tandem with these legislative and judicial developments, the courts were also being called upon to consider the relationship between the company and its principal organs, and its dealings with outsiders. In November 2006, the Companies Act, 2006 (the "Act") became law, but it was not until October 1st, 2009, that the Act came fully into force, the previous three years seeing a staggered implementation of its provisions.

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The Act brought about a substantial reform and modification to company law in the United Kingdom, including the codification of law relating to directors' duties and substantive changes to the law relating to derivative actions. The obligations set out in the UK Corporate Governance Code (the "Corporate Governance Code"), which replaces the Combined Code on Corporate Governance, includes a number of additional corporate governance obligations that the corporations and its directors must comply with.

BOARD STRUCTURE/COMPOSITION

In UK, there are two types of companies, public and private. Both public and private companies have a single board of directors comprising of all the directors of a company. It is common, especially for the listed companies to see a mix of both executive and non-executive directors on the board. Such an arrangement is called as two-tiered or unitary company structure.

DIRECTORS' DUTIES AND LIABILITIES

The government therefore believes that codification of directors' duties will make the law in these areas more consistent, certain and accessible. Companies Act 2006 ("the Act"), which received Royal Assent on the 8th November 2006, codifies directors' duties including the long-established fiduciary duties as well as the common law duty of care and skill into a statutory statement of seven general duties. Below are the seven general duties set out in ss.170 to 181 of the Act with particular reference to the new additions introduced by the Act:

- Duty to act within their powers
- Duty to promote the success of the company
- Duty to exercise independent judgment
- Duty to exercise reasonable care, skill and diligence
- Duty to avoid conflicts of interest
- Duty not to accept benefits from third parties
- Duty to declare interest in proposed transaction or arrangement with the company

These new codified duties are based on the common law rules and equitable principles that were in force prior to the Act.62 In the recent ruling of *East Ford Ltd. V. Gillespie*, the Scottish Court of session commented that section 170 (4) of the Act, which requires the codified directors' duties to be interpreted and applied in the same way as the common law and equitable principles, is aimed at ensuring that the codification of directors' duties does not render the law inflexible and does not prevent the courts from developing the law in order to deal with "changing commercial circumstances".

There are also a number of other statutory provisions under which the directors can be personally sued, including legislations and regulations relating to securities, insolvency, pensions, health and safety, the environment, and antitrust issues etc.

In the UK, corporate governance is provided by a combination of:

- Common law rules
- Statute
- The Articles of Association of a company
- The Listing Rules that apply to all companies listed on the main market of the London Stock Exchange
- The Corporate Governance Code
- The City Code on Take-Overs
- The Code of Market Conduct
- Non-binding guidelines issued by institutional investors such as pension-funds and insurance associations.

Directors owe their duties to the company and it is therefore the company that must bring an action against the director (though in limited cases a shareholder may instigate a derivative action). This rule does not prevent a third party bringing an action directly against the director if the director has assumed personal responsibility for the actions of the company. A director may also be held liable to third parties as a result of a breach of a statute.

At present, English law does not have a developed concept of "class actions", so while similar cases are sometimes joined in the courts for administrative convenience, the plaintiffs must be known as individuals.

Under the Act, a company is prohibited from exempting a director from a liability that results from the directors' negligence, breach of duty, default, or breach of trust in relation to the company. However, a company may provide an indemnity (termed as a "qualifying third-party indemnity") against any such liability provided that it does not indemnify a director against any liability to the company; any fines imposed in criminal proceedings; any sums payable to a regulatory authority by way of penalty for non-compliance with any regulatory requirement; or for any costs incurred in defending any criminal proceedings in which the director is convicted or any civil proceedings brought by the company in which judgment is given against the director.

A company can also purchase directors' and officers' insurance to protect a director from liability in connection with any negligence, default, breach of duty or breach of trust by that director to the company.

Therefore, to summarize directors' individual liabilities for commission of corporate fault in UK, it is pertinent to note that, despite the introduction of the new Corporate Governance Code, the rules of corporate governance are likely to continue to change and develop over the course of next few years. The OECD Convention, the Corporate Governance Task Force of Basel Committee, and the International Association of Insurance Supervisors are each conducting a review of corporate governance principles, and the Financial Services Authority in the UK is actively engaging in each of these organizations as they develop their work.

THE CORPORATE MANSLAUGHTER AND CORPORATE HOMICIDE ACT, 2007

The Corporate Manslaughter and Corporate Homicide Act 2007 (**the Act**) was passed by Parliament on 26 July 2007. It came into force on 6 April 2008. The Act was created with the intention of remedying a defect in the common law offence of "gross negligence manslaughter", which meant that successful convictions were difficult to secure against larger organizations. The new offence takes account of this by creating collective culpability among senior management and eliminating the need to identify specific guilty individuals.

The Act creates the criminal offence of **corporate manslaughter** (for England and Wales) or **corporate homicide** (for Scotland) and puts the law of corporate manslaughter on a new and statutory footing. The offence must be tried in the Crown Court, by jury. An organization affected by the act is guilty of an offence if the way in which its activities are managed or organized causes a person's death and if this amounts to a gross breach of a relevant duty of care owed by the organization to the deceased. However, an organization is guilty of an offence only if the way in which activities are managed or organized by senior management is a substantial element in the breach of the relevant **duty of care.**

The organizations affected are:

- Corporations
- Most governmental departments and governmental agencies (including by implication local authorities)
- Police forces
- Partnerships, trade unions or employers' associations that act as employers

An organization found guilty under the act faces an unlimited fine. Prosecution costs can also be awarded against the organization, and the court may also order the breach to be remedied and order the conviction to be publicized. The Sentencing Advisory Panel, which advises on sentencing issues in England and Wales, has suggested that punishment include, but not be limited to, a fine of 2.5% to 10% of annual turnover and mandatory publicity orders. The common law offence of manslaughter by gross negligence is abolished in its application to corporations and to any other organization subject to the act.

Further, while an individual cannot be held liable for aiding, abetting, counseling or actively sponsoring the commission of an offence under the act, directors and senior managers remain liable to prosecution under the common law offence of gross negligence manslaughter.

The new legislation will affect the following classes of insurance:

- Employers' Liability (EL)

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- Public and Products Liability (PL/Prods)
- Motor

Although there are already near about eight hundred cases of „corporate manslaughter" already before the different courts in UK with competent jurisdiction to try such cases, but so far, only one conviction (as recent as February, 2011) has generated world-wide interest and has established its purpose.

Winchester Crown Court while deciding *R. v Cotswold Geotechnical Holdings Ltd.*, imposed a fine to the tune of GBP 385,000 on the company, representing 116 per cent of its annual turnover, after being convicted of **corporate manslaughter** following the death of a geologist, Alexander Wright, when a trench collapsed. As stated above, this company is the first to be convicted under the Corporate Manslaughter and Corporate Homicide Act 2007, and it may herald more prosecutions of larger organizations. The jury was told to assess the conduct of the director of the company, Peter Eaton in reaching a verdict, since he had been alleged of ignoring a ruling on the danger of unsupported pits.

Therefore, such a legislation can potentially be the harbinger of many such prosecutions against corporate giants and can ensnare and prosecute them subsequently, thereby, being one of its kind, in the history of all legislations world-over, in holding a corporation directly and criminally liable for the faults committed by it therein.

INDIA

The criminal liability of the Directors for the acts of the Company is one area of interface between the corporate veil and its lifting, that evokes passionate responses from both sides of the divide and renders judicial pronouncements on this point highly crucial. The fact that a corporation, being merely a person in law only, and not a real one, can act only through its employee inevitably inherits an omnipresent bogey haunting every pronouncement – the ancillary and incidental liability of the directors.

A BRIEF BACKGROUND

In India, an Anglo-Saxon board structure is maintained whereby executive and non-executive directors are organized into a unitary board. The historical analysis of emergence of Corporate Governance in India can be divided into two eras, Pre Liberalization and Post Liberalization.

When India attained independence from British rule in 1947, the country was poor, with an average per-capita annual income under thirty dollars. However, it still possessed sophisticated laws regarding "listing, trading, and settlements."It even had four fully operational stock exchanges. Subsequent laws, such as the 1956 Companies Act, further solidified the rights of investors.

In 1992, in a defining moment in India's corporate-governance history, the Indian Parliament created the Securities and Exchange Board of India ("SEBI") to "protect the interests of investors in securities and to promote the development of, and to regulate, the securities market." In the years leading up to 2000, as Indian enterprises turned to the stock market for capital, it became important to ensure good corporate governance industry-wide. Additionally, a plethora of scams rocked the Indian business scene, and corporate governance emerged as a solution to the problem of unscrupulous corporate behaviour.

In 1998, the Confederation of Indian Industry ("CII"), "India's premier business association", unveiled India's first code of corporate governance. However, since the Code's adoption was voluntary, few firms embraced it. Soon after, SEBI appointed the Birla Committee to draft a code of corporate governance. In 2000, SEBI accepted the recommendations of the Birla Committee and introduced Clause 49 into the Listing Agreement of Stock Exchanges. Clause 49 outlines requirements vis-à-vis corporate governance in exchange-traded companies.

Then, Chandra Committee, under the Chairmanship of Naresh Chandra, reported on December 23, 2002 and opened by noting the advances that had been made as a consequence of the Birla Report and cl.49 of the listing agreement. In 2003, SEBI instituted the Murthy Committee to scrutinize India's corporate-governance framework further and to make additional recommendations to enhance its effectiveness. SEBI has since incorporated the recommendations of the Murthy Committee, and the latest revisions to Clause 49 became law on January 1, 2006.

An Expert Committee on Company Law was established by the Ministry of Company Affairs under the chairmanship of Dr Jamshed J. Irani, a director on the board of Tata, on December 2, 2004, on the same lines as the previous committees but with a broader scope of review.

LIABILITY ISSUES (DIRECTORS AND COMPANIES)

The duties of a director have not been codified under the Companies Act, 1956. However, the Companies Bill, 2009 does have a clause which exclusively deals with the duties of a director. Sec. 147 talks about the duties of a director. Under the Indian Laws, a director is deemed to be an officer in default, which implies that he/she shall be held responsible for default, non-compliance, failure, refusal, or contravention of any statutory obligation of the company. Each director shall be individually held liable for punishment or penalty for any such default.

Various Indian legislations in respect of Labour Code, environment, consumer protection, taxation, foreign exchange, and negotiable instruments deem directors to be liable for the violations of the provisions. However, interestingly, a director is not automatically liable for the torts of the company irrespective of the size of the company or of the degree of his or her control over its affairs. There are several defenses available to the director under such circumstances.

Even the judiciary has adopted an approach where it does hold the director liable for acts of the company. The case of *Maksud Saiyed v. State of Gujarat*, decided by a two judge bench of the Supreme Court in September 2007, is an important judgment dealing with the criminal responsibility of directors for offences committed by their companies.

The observation of the Apex Court in the *Maksud Saiyed* case which is of paramount importance is that the Directors can be held vicariously liable for offences committed by their companies only where the governing statute permits that by way of an express provision.

But the Indian corporate jurisprudence faces a major setback when it doesn't have any express or implied provision in any central or state legislation, holding the corporation directly and/or criminally liable for its commission of corporate faults, unlike The People's Republic of China and the UK. Be it China's Criminal Laws or UK's Corporate Manslaughter and Corporate Homicide Act, 2007, these contrasting jurisdictions have legislations which address the concern of holding the corporation strictly liable as an entity, separate from that of its directors.

CONCLUSION

The Company and the individuals acting, behind its magical cloak, have always been slotted into separate pigeonholes, as far as corporate law jurisprudence is concerned. It has been well settled principle throughout a catena of judicial pronouncements that a company, although an artificial creation, is nevertheless a separate entity in the eyes of law. However, this is where Indian legislation needs to draw level with the other jurisdictions in relation to strengthening its legal responsibility wherein the company can be arraigned as an accused separately for the offences it is capable of committing. To be able to prosecute such conglomerates of wealth and power, a system, succinct and sound in law, has to be adopted to that effect. Laws drafted with the purpose of holding the offender liable for the offences committed should not have major exceptions as in the nature of immunity which these corporations are afforded. Although certain elements will always be difficult to reconcile, like the fact that at the end of the day, it is the people's money which is affected (be it in the form of fraud committed by the company or any pecuniary penalty imposed for the same offence), but legal wisdom and immaculate drafting will ensure that the money changes correct, deserving, rightful hands, both behind and in obverse of the necessary evil, which is the "corporate veil".

Or else, as opined by a Supreme Court judge in reference to the Bhopal holocaust, "*the Bhopal case took 25 years to fix responsibility on the convicts; it may take another 25 years if it starts all over again and* **none of the victims would be alive by then***.*"

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