

# CPJ Global Review

**A National Journal of CPJ-CHS & School of Law**

An Insight of Management Thinking, Empirical Research Studies  
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# CHANDERPRABHU JAIN COLLEGE OF HIGHER STUDIES & SCHOOL OF LAW

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## CPJ GLOBAL REVIEW

*CPJ GLOBAL REVIEW is an Academic Journal that brings together all the Academicians and Corporate to provide an insight of Management Thinking, Empirical Research Studies and Management Practices around the globe. This National Journal is devoted to disseminate findings from research work and exploration of original ideas concerning Business, Management and Technology.*

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**EDITORIAL*****FROM THE DESK OF DIRECTOR GENERAL***

Welcome to our National Journal “CPJ Global Review” July, 2019 Issue. It is a peer-reviewed Journal that aims at providing high quality teaching and research material to Academicians, Research Scholars, Students, Consultants and Management Professionals. This issue of CPJ Global Review covers a wide range of topics in the field of Business Management including Finance, Marketing, Human Resource Management, International Business, Information Technology and other allied disciplines including Economics and Business Environment.

We appreciate the input and feedback from our anonymous reviewers, contributors and students. We are obliged to our widely spread readership for their continued support and encouragement in our endeavor to strengthen every issue of CPJ Global Review. The credit to this achievement also goes to all Authors, Academicians, Editorial Board and Editorial Advisory Committee who have contributed to make this journal a quality journal.

We highly solicit to have your continuous support and feedback for further growth of the Journal with full of happy learning for all the readers!!



**Sh. Yugank Chaturvedi**  
**Editor-in-Chief**

## EDITORIAL

### ***FROM THE DESK OF DIRECTOR - ACADEMICS***

It gives us immense pleasure to present another issue of our National Journal “CPJ Global Review” Vol. 11, No. 1, July-2019 (ISSN No: 0975-1874), packed with interdisciplinary research papers shedding new light on contemporary challenges in the domain of Indian business and management.

Through critically informed empirical and theoretical investigations, the authors have presented the latest thinking and innovative research on major management topics impacting profoundly the management theory and practice. CPJ Global Review encourages academicians, researchers and practitioners to share their cross-cultural investigations addressing the challenges in the context of global issues concerning business concerning Management, Commerce, Finance and IT sphere.

We have received more than 30 papers for publication for this issue. The Editorial Board has selected papers with mixed themes to reflect diverse areas of Business Challenges that have been investigated by the authors. After critical blind review by the members of the Editorial Board and peer review of papers/articles by the subject experts, only 12 papers have been selected for publication, which include articles and research papers focusing on a plethora of topics/articles. All the papers open up new dimensions of research in the identified latest areas.

We are thankful to all members of Editorial Advisory Committee and our Editorial Board Members, learned reviewers and outstanding contributors, for their continuous and incredible support in bringing out this issue successfully.

Contributions from Academicians, Professionals and Industry Practitioners are always welcome. We hope that the present edition of CPJ Global Review with all its illuminating features would serve the intended purpose and shall be of immense use for researchers and our revered readers. Your opinion is highly solicited for the continuous growth of the Journal.



**Prof. J. P. Mohla**  
**Editor**

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# Job Satisfaction of Employees in Superspeciality Hospitals in Delhi and NCR

Dr. Suniti Chandiook\*

## Abstract

*The objective of this study was to investigate how medical and nursing staff of the Hospital is affected by specific motivational factors, that satisfaction and motivation the work force. The study of job satisfaction is justified on the basis of its potential value of understanding and in generating the positive outcomes from both the organisational and individual perspectives. The understanding could be used in crafting strategies for organisational and the employees working in it. The present study was conducted on the hospital employees as they are one of the most important stakeholders in hospitals to explore the factors influencing their job satisfaction. The data was collected from 329 employees working in a hospital but all are from different sectors Medical consultants (n=52), Non Medical (n=110), Nursing (n=128), Paramedical (n=39). A previously developed and validated instrument addressing four work-related motivators (Organizational Role, Pay and compensation, Relationship and Co-worker, Promotion and carrier Growth) was used. four categories of health care professionals, medical consultant, Non-Medical, Nursing, Paramedical participated in job satisfaction and was compared across socio-demographic and occupational variables. The Factor analysis was performed using principal component analysis (PCA) method for extracting factors to establish characteristic components of the job satisfaction variables measured. By examining the extent of variability in the employees' job satisfaction explained by the various factors determined, the study further identified the correlation of each resulted factor with the job satisfaction scores.*

**Keywords:** Satisfaction, Motivation, Ethics, Responsibility, Job

## Introduction

Employee satisfaction is the terminology used to describe whether employees are happy and contented and fulfilling their desires and needs at work. Many measures meaning that employee satisfaction is a factor in employee motivation, employee goal achievement, and positive employee morale in the workplace. As per Vroom "Employee Satisfaction is a positive orientation of an individual towards a work role which he is presently occupying". Employee satisfaction is a measure of how happy workers are with their job and working environment. Keeping morale high among workers can be of tremendous benefit to any company, as happy workers will be more likely to produce more, take fewer days off, and stay loyal to the company. There are many factors in improving or maintaining high employee satisfaction, which wise employers would do well to implement. Employee satisfaction, while generally a positive in organization, can also be a bad luck if mediocre employees stay because they are satisfied with your work environment. Many experts believe that one of the best ways to maintain employee satisfaction is to

make workers feel like part of a family or team. Holding office events, such as parties or group outings, can help build close bonds among workers. Many companies also participate in team-building retreats that are designed to strengthen the working relationship of the employees in a non-work related setting. Camping trips, paintball wars and guided backpacking trips are versions of this type of team-building strategy, with which many employers have found success. Yet money cannot solve all morale issues, and if a company with widespread problems for workers cannot improve their overall environment, a bonus may be quickly forgotten as the daily stress of an unpleasant job continues to mount.

If possible, provide amenities to your workers to improve morale. Basic considerations like these can improve employee satisfaction, as workers will feel well cared for by their employers. The backbone of employee satisfaction is respect for workers and the job they perform. In every interaction with management, employees should be treated with courtesy and interest. An easy avenue for employees to discuss problems with upper management should be

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maintained and carefully monitored. Even if management cannot meet all the demands of Employees, showing workers that they are being heard and putting honest dedication into compromising will often help to improve morale. Satisfaction = f(what employee expects, what she gets, time, back ground of the employee- social, economic, cultural) Satisfaction being a continuous process starts from the day 1 and gets reinforced with time depending on the importance of the various factors considered to be important for the individual employee. Loyalty towards the organization starts to develop when the employee continues to get the positive reinforcements on various important aspects for the duration of the employment.

**Core Values as a Foundation of Employee Satisfaction:** These are the values that have enabled employees to build the leading company in industry; these are the values that will fuel employees' worldwide growth in the coming years; and these are the values that will drive employees' career:

- Professionalism - Demonstrating professional methods, character and standards. Treating prospects, clients and co-workers generously and charitably at all times, but especially in the face of adversity.
- Enthusiasm - Showing excitement, optimism and passion for your work.
- Resourcefulness - Acting effectively and imaginatively to produce great results from scarce resources.
- Self-directedness - Working independently and autonomously to achieve the goals set by management.
- Ethics - Acting in accordance with the accepted principles of right and wrong that govern the conduct of our profession.
- Unselfishness - Putting others before yourself, giving your time and effort for prospects, clients and co-workers. Showing cooperative effort as the member of a group to achieve a common goal.

### Determinants of Employee Satisfaction

Employee satisfaction is a multi-variable and indescribable concept. There are number of factors that influence employee satisfaction. These factors can be classified into two categories.

**(A) Organizational Variables:** The organizational determinants of employee satisfaction play a very important role. The employees spend major part of their time in organization so there are number of organizational factors that determine employee satisfaction of the employees. The employee satisfaction in the organizations can be increased by organizing and managing the organizational factors.

1. **Overall Individual satisfaction:** Employees be should satisfy with the organization as a great place to work.
2. **Compensation and Benefits:** This is the most important variable for employee satisfaction. Compensation can be described as the amount of reward that a worker expects from the job. Employees should be provided with competitive salary packages and they should be satisfied with it when comparing their pay packets with those of the outsiders who are working in the same industry.
3. **Nature of Work:** The nature of work has significant impact on the employee satisfaction. Employee satisfaction is highly influenced by the nature of work. Employees are satisfied with job that involves intelligence, skills, abilities, challenges and scope for greater freedom.
4. **Work Environment and Conditions:** Employees are highly motivated with good working conditions as they provide a feeling of safety, comfort and motivation. On contrary, poor working conditions brings out a fear of bad health in employees. Employees spend 6 to 8 hours at their workplace every day which makes a workplace their second home. It must be well lit and well ventilated with the right amount of lights, fans, air-conditioning. Cleanliness is of utmost importance as there are a huge number of workers working at a job place. The more comfortable the working environment is more productive will be the employees.
5. **Job Content:** Factors like recognition, responsibility, advancement, achievement etc can be referred to as job content. A job that involves variety of tasks and less monotonous results delivers greater employee satisfaction.
6. **Job Satisfaction:** Job satisfaction is the favorableness

or un-favorableness with which employees view their work. As with motivation, it is affected by the environment. Job satisfaction is impacted by job design. Jobs that are rich in positive behavioral elements – such as autonomy, task identity, task significance and feedback contribute to employee's satisfaction. Each element of the environmental system, can attract or detract from job satisfaction.

7. **Organizational Level:** The jobs that are at higher levels are viewed as prestigious, esteemed and opportunity for self-control. The employees that are working at higher level jobs express greater employee satisfaction than the ones working at lower level jobs.
8. **Opportunities for Promotion:** Promotion can be reciprocated as a significant achievement in the life. It promises and delivers more pay, responsibility, authority, independence and status.
9. **Work Group:** There is a natural desire of human beings to interact with others and so existence of groups in organizations is a common observable fact. Isolated workers dislike their jobs. The work groups make use of a remarkable influence on the satisfaction of employees. The satisfaction of an individual is dependent on largely on the relationship with the group members, group dynamics, group cohesiveness and his own need for affiliation.
10. **Leadership Styles:** The satisfaction level on the job can be determined by the leadership styles. Employee satisfaction is greatly enhanced by democratic style of leadership. It is because democratic leaders promote friendship, respect and warmth relationships among the employees.
11. **Communication Methods:** When administrative policies and all important announcements are communicated to the employees, it boosts their morale. The methods chosen for communication also play an integral role.
12. **Safety Measures:** An employer must make sure that he provides a safe environment to his/her employee. The security measures outside office include security guards and parking facility. While inside the office, there must be introduced a safe environment for male and female employees to work. There must be

no discrimination or harassment practiced and the employee should be given equal opportunity to grow as an individual despite being male or female.

**(B) Personal Variables:** The personal determinants also help a lot in maintaining the motivation and personal factors of the employees to work effectively and efficiently. Employee satisfaction can be related to psychological factors and so numbers of personal factors determine the employee satisfaction of the employees.

1. **Personality:** The personality of an individual can be determined by observing his individual psychological conditions. The factors that determine the satisfaction of individuals and his psychological conditions is perception, attitudes and learning.
2. **Age:** Age can be described as a noteworthy determinant of employee satisfaction. It is because younger age employees possessing higher energy levels are likely to be having more employee satisfaction. In older age, the aspiration levels in employees increase. They feel completely dissatisfied in a state where they are unable to find their aspiration fulfilled.
3. **Education:** Education plays a significant determinant of employee satisfaction as it provides an opportunity for developing one's personality. Education develops and improvises individual wisdom and evaluation process.
4. **Gender Differences:** The gender and race of the employees plays important determinants of Employee satisfaction. Women, the fairer sex, are more likely to be satisfied than their male counterpart even if they are employed in small jobs.

The employee satisfaction can also be determined by other factors like learning, skill autonomy, job characteristics, unbiased attitude of management, social status etc. It is important for managers to consider all these factors in assessing the satisfaction of the employees and increasing their level of employee satisfaction.

## Literature Review

Partridge (1981) studied the job satisfaction level of women in Britain in which he found that the job satisfaction level of women was more as compared with black men, as they

normally have low expectations from their jobs. At the same time they have a greater feeling that the alternative jobs available to them differs very less than those available to them. Beumont (1982) in his article highlights the job satisfaction level of general household in United States & Britain where in there is a close fit relationship in U.S than Britain. In the study he found that in U.S there is a positive relationship between Job Satisfaction and Age where as in Britain it was considerably low. Savery (1987) highlights the effect of motivators on job satisfaction. He states intrinsic motivators' helps in achieving job satisfaction. The study says stress being one of the major reason leading to dissatisfaction therefore it has to be taken care of properly to reduce the level of dissatisfaction. The immediate supervisor is the person who has a major influence on job satisfaction. The supervisor helps in increasing the satisfaction level by offering more of intrinsic motivators like challenging work and career development to the subordinates and he is the one who provides the most tangible assistance to the subordinate. Savery (1989) highlighted the job satisfaction of nurses in Perth, Western Australia. The job satisfaction level of the nurses was mainly due to interesting and challenging work which was followed by a feeling of achievement wherein, he even said salary was ranked as a very low satisfier. The job satisfaction level increased as the person grew old where in the variables like gender, time in hospital, position held were controlled. Organizations should always focus on satisfying the three basic needs (Individual motivators, Employee relationships and personal relationships) of an employee which will in return help the employees in achieving job satisfaction. Ingram (1992) states that job satisfaction is related to work, co-workers, promotion, pay, supervision relates to customer orientation. In service industry front line people are the one who interact with the customers on a regular basis and influence the customer perception by their behaviors as well as the appearance of the product /service knowledge. Promotion is a key factor in job satisfaction. It is the duty of the manger to monitor and improve the employee satisfaction level related to supervision quality, working conditions, intrinsic compensations and benefits and company policies so that it helps in achieving the desired level of satisfaction within the employees. Melvin (1993) stated that the environmental design of an organization plays a very important role in job satisfaction at the same time it also plays an important role in employee's high job involvement. A good environmental design of an organization helps in resolving the conflicts and confusion.

The author even cites that it is the responsibility of the management to design the environment in such a manner that it reduces the dissatisfaction where in the work tasks, working patterns are properly mentioned.

Tietjen & Myers (1998) discusses the theories of job satisfaction mentioned by Herzberg and Lockers. Job Satisfaction is always maximum when an employee is satisfied with the work which is assigned to him. A well-furnished office and the temperature of the work environment doesn't help much whereas the base duty allotted in the job and the intrinsic related feelings of an individual creates a positive attitude in him about the job. Salary, perks always doesn't lead to job satisfaction it is the intrinsic feelings of an individual which leads to job satisfaction. MacDermid (1999) studied the job satisfaction level of workaholics. He said there are six variables of workaholic patterns i.e. Workaholics, Enthusiastic Workaholics, Work Enthusiastic, Unengaged Workers, Relaxed Workers and Disenchanted Workers. The job satisfaction level and career satisfaction level was much more in Enthusiastic Workaholics, Work Enthusiastic, Relaxed Workers than Workaholics, Unengaged Workers and Disenchanted Workers because of the future career prospects, working involvement, drive and work enjoyment. Oshagbemi (1999) highlights the academics and their managers' job satisfaction levels: A comparative Study. Managers and academics are not able to achieve job satisfaction because they are not satisfied with the present pay, research and administration and management. Therefore, organizations have to look forward for the ways to reduce the dissatisfaction level where in they can make few changes to the code of conduct of the administration and management and helping the employees to achieve a satisfaction level. Zaki (2003) explains the job satisfaction and performance of Lebanese banking non-managerial staff. The researcher found a significant relationship between job satisfaction and gender in relation to pay and supervision. Only satisfied people in the organization perform and it is the duty and responsibility of the organization to take proper care of them. Female employees were more satisfied with the salary whereas male employees were more satisfied with the supervision. The author even says at times this may not be relevant because self-ratings are inflated and generally colleagues' performance is under rated. Warn (2003) highlighted on work place dimensions leading to stress & eventually reducing job satisfaction. Stress is generally experienced due to loss of control of the desired outcomes of the job. Stress is felt at the work place due

to lack of power, role conflict and role ambiguity leading to job dissatisfaction. The concept of controllability brings in a solution in decreasing the stress and leading to job satisfaction, wherein an individual brings in a mindset of expectations and needs which is dependent on the individual's aspirations and control over various aspects of work situations. A positive working atmosphere like positive learning environment or no harassment environment or not being fearful in work place helps in reducing stress and achieving job satisfaction.

Saari & Judge (2004) discussed on employee attitudes leading to job satisfaction. The employee attitude is related to the job, when a person has a liking towards to the job the satisfaction level increases there by increasing the organization performance as in a whole. Austin (2007) mentions "Self-fulfillment", "Independence" and "Job environment" are the key reasons to managers' job satisfaction in Cyprus. Good pay, highly skilled subordinates, growth opportunities relates to self-fulfillment. Employers should focus on these three factors i.e. the demographic variables (age, gender, number of years in the organization, public or private sector, number of employees supervised) independence in work and the work environment to make the system flow flawlessly leading to job satisfaction. Omey (2007) discusses the relationship between educational level and job satisfaction. He says though there is a relationship it also says that there is no relationship as well. Higher educated workers are always satisfied in comparison with the lower educated workers, the fact being higher educated people obtain a job of better quality. He adds lower educated workers can also have higher level of job satisfaction from the psychological benefits of a "good job". Quality of jobs offered to the employees differs with the educational level leading to different degree of job satisfaction. Job characteristics have a big role as here one gets a scope to use his or her own skills. Therefore the author suggests that organizations should focus more on job quality than educational level.

Silverthorne (2008) studied the contribution of personality variable locus of control on job satisfaction and related outcomes such as performance and job stress. Findings reveal that internal locus of control leads to lower level of job stress and higher level of job satisfaction and performance. External locus of control doesn't reduce the job stress whereas internal locus of control leads to performance and satisfaction by reducing the job stress.

Arts (2010) studies the link between Fringe benefits and job satisfaction. Fringe benefits always don't lead to job satisfaction. It is always acceptable to an extent where in the employee has a feeling that he is able to satisfy his needs. Many a times it is found that it doesn't match the requirement of the employee leading to dissatisfaction. Therefore, organizations have to review their system in a better way which will provide fringe benefits as required and provide employees every opportunity to avail them, ultimately leading to job satisfaction. Antvor(2010) discusses the influence of national culture on the national job satisfaction level and at the same time he also discusses its effect on other evaluations of job related aspects. They state that although cultural influence was there in national job satisfaction, all job aspects of job satisfaction were not cultural context specific. Management has to be careful while comparing the results from a cross-national job satisfaction study.

Mudor and Took son (2011) discusses about the link between human resource management practices, job satisfaction and finally the turnover. Supervision, training and pay practices which are the three variables in HRM Practices are very adversely associated with job satisfaction. Effective jobs help in achieving job satisfaction with continuous training and good pay. Job satisfaction is directly related to turnover. Nir (2012) studies the importance of teachers' perceived organizational support on Job Satisfaction. There are two aspects to satisfaction mainly intrinsic and extrinsic. Earned status and respect are those of the extrinsic factors which plays an important role in employee satisfaction. Self-efficacy as an intrinsic factor helps as it promotes individual self-fulfillment. When organization value its employees contribution, cares about their wellbeing then employees are satisfied intrinsically and extrinsically. Al-Zoubi (2012) studies the relationship between job satisfaction of various private and public Jordanian organizations and Salary. He found that salary is not a prime factor that influences job satisfaction. Though financial effect is fast but has very sort effect. Job satisfaction is always a long-term requirement by an organization. Therefore, organizations should think of innovative ways that will enhance all job aspects including salaries as well as psycho-social variables that enhances the work life quality. Witte (2012) highlighted on the group differences aspect in job satisfaction. The study was done on the banking sector in Belgium. A model was created for testing the hypothesis. The model was "Job Demand Control support" and the analysis found says that job



demand (It is a psychology which says the job requires certain capabilities) have the highest effect in explaining satisfaction in relation to the working conditions and less in relation to explaining satisfaction with job content. Singh & Jain (2013) highlights on employees job satisfaction and its impact on their performance. Employees' attitude reflects the moral of the company. Happy employees play an important role in the areas of customers' service and sales as they are the one to interact with the customer on a daily basis. Work environment is the key factor in job satisfaction. Good work environment and good working conditions leads to job satisfaction at the same time helps in increasing employee work performance, profitability, customer satisfaction as well as retention. Seniwoliba A.J. (2013) studies the job satisfaction level of teachers in public senior high school in the Temale Metropolis of Ghana and it was found that extrinsic factors i.e. salary, incentives, working conditions, security (Medical allowance and future pension benefits) motivates the employees and helps in achieving job satisfaction effectively. Salary and working conditions play a larger role in job satisfaction and by enlarge organizations should focus on it always and take steps for improving it. Equal pay for equal rank has to be preached by organizations. Aristovnik (2014) discusses influence of organizational and environmental factors on employee job satisfaction. The police employees rated salary and security as the least motivator and support from the management as high. Police employees rate trust and belongingness as the key factor to job satisfaction.

**Statement of the Problem:** According to study in Delhi and NCR lots of upcoming hospitals are coming and establishing their business in Delhi and NCR. They are selection and recruiting lots of talented employees. Do these hospitals managements are giving right salary, environment, culture etc to their employees, really these employees are happy and satisfied in their hospital or not. In our study we are trying to find out the satisfaction level of employees who are working in these hospitals. We analyses the satisfaction level in 4 main factors, i.e. Organizational Role, Relation with Co Workers, Pay and Compensation and Promotion and Career Growth.

### **Objective of the Study & Scope of the Study:**

According to study to measure the satisfaction level of the employees and study the employees perception towards organization. To study the attitude of the employees towards their work, to identify the factors that motivates

the employees and the best practices and methods to enhance commitment and employee retention in the organisation. The scope of the study is to understand employees satisfaction level and their perceptions' about the organisational motivation & what are the factors which affect the employees who are working in Delhi's one of the best super specialty hospital.

### **Research Methodology**

According to study the data was collected from one of a Super specialty hospital in Delhi having 1200+ under various departments of Medical, Non-medical, Nursing and Paramedical, which are further sub-categorized into various departments. The Data Collection Technique is both primary and secondary. The primary data is collected through "Questionnaires & Surveys, interview" Responses are analyzed with quantitative methods by assigning numerical values to Likert-type scales Results are generally easier to analyze. The Pre-test/Post-test can be compared and analyzed in study. A research study is carried out on a sample from a population of total of 329 employees were surveyed. The 329 employees are from different department 52 from Medical, 110 from Paramedical, 128 from Nursing and 39 from Non medical. A Structured Questionnaire has been prepared to get the relevant information from the respondents. The questionnaire consists of a variety of questions presented to the respondents for their despondence are Open ended and Multiple-choice questions. The Questionnaire used in this study is composed of 3 parts. First part includes the demographic questions such as name, age, and department. The second part deals with job content and satisfaction. Job content and satisfaction is measured by job content and satisfaction Questionnaire. The third part includes job satisfaction questions and suggestions. Questions are framed in such a way that the answers reflect the ideas and thoughts of the respondents with regard to level of satisfaction of various factors of employee satisfaction. The questionnaire has total 20 questions with 41 sub questions were made and Likert scaling techniques (5. Strongly agree 4. Agree 3. Neutral 2. Disagree 1. Strongly disagree). All the questions were related to these factors and also a suggestion box was also incorporated to comprehend the needs of the employees other than these four factors to motivate them. Analytical representation is represented with the help of SPSS, MS Excel, Cronbach's Alpha, Frequency Tables, Descriptive Statistics, Factor Analysis test.

## Data Analysis

**Reliability Test:** In order to extract the dimensions and to test the validity and reliability of the analysis, the exploratory factor analysis and Cronbach's alpha for internal consistency were employed to determine the satisfaction of the employees.

1. Reliability Analysis	
Cronbach's Alpha	N of Items
.892	41

**Table 1: Reliability test**

Source: Estimated from primary data, Sept-Jan 2018

**Interpretation:** According to the table 2 Cronbach's alpha which is the most common measure of internal consistency. It is the most commonly used in a survey / questionnaire that form a scale, and you wish to the scale is reliable. The alpha coefficient of the items is 0.892, suggesting the items have relatively good internal consistency.

2. Demographic Profile of Respondent (Frequency Test)				
S. No	Items	Response	No of Respondent	%
	Gender of Employees	Male	156	47.4
		Female	173	52.6
	Age of Employees	Valid less than 25	105	31.9
		26-35	160	48.6
		36-45	56	17.0
		46-55	3	.9
		50 and above	5	1.5
	Level of Employees	Medical	52	15.8
		Non-Medical	110	33.4
		Nursing	128	38.9
		Paramedical	39	11.9

**Table 2: Demographic Profile of Respondent**

Source: Estimated from primary data, Sept 17-Jan 2018

Simple Frequency of employees has been calculated based on 3 descriptions i.e. Level, Age and Gender.

## Descriptive Statistics

### a. Complete Statistics

S. No	Items	N	Mean	Std. Deviation
1	In the last six months, someone at work has talked to me about my progress	329	0.057	1.029
2	My organization is dedicated and serious about my professional development	329	0.049	0.897
3	Good work is appreciated and recognized in my organization	329	0.056	1.01
4	My organization has good reward and recognition programme	329	0.049	0.881
5	I feel free to share my view with my seniors and HOD	329	0.052	0.952
6	The leadership clearly shares organizational goals and challenges with employees	329	0.043	0.789
7	I am aware of my Job Description	329	0.035	0.64
8	I enjoy my work and challenges it provides	329	0.042	0.769
9	My job encourages me to constantly improve my knowledge and skills	329	0.039	0.699
10	I get the training I need to do my job well	329	0.043	0.781
11	I have the opportunity to learn new skills which would help me to advance in my career	329	0.039	0.701
12	I get proper leaves	329	0.065	1.172
13	Management arranges several activities along with the designated job	329	0.066	1.2
14	I feel happy and proud to work here	329	0.043	0.779



15	I am aware of the hospital's mission and vision and my day to day activities are in tune with organization's vision and mission	329	0.034	0.621
16	Trainings are being provided on organization's vision and mission	329	0.036	0.653
17	Organization has a reputation of being fair and just	329	0.041	0.749
18	I receive proper guidance and feedback regarding my work	329	0.05	0.901
19	The management treats its employees with respect and dignity	329	0.053	0.96
20	My supervisor or someone at work seems to care about me as a person	329	0.05	0.914
21	I was told clearly about my compensation and benefits when I joined this organization	329	0.047	0.852
22	Increments and appraisals are fair and transparent	329	0.059	1.07
23	I am encouraged to participate in organizational decision making process	329	0.05	0.912
24	My supervisor encourages my suggestions and correct decisions are taken	329	0.049	0.883
25	I am satisfied with overall welfare facilities for employees in the organization	329	0.055	1
26	Employee grievance procedure of the organization is adequate and fair	329	0.043	0.778
27	I can count on my team members for help and guidance	329	0.04	0.72
28	Team work is recognized and rewarded in our organization	329	0.047	0.855

30	I would recommend it as a good place to work to my friends	329	0.048	0.88
31	I get a feeling of personal satisfaction from my work	329	0.052	0.938
32	I am satisfied with present working environment	329	0.05	0.905
33	I have a safe and secure work environment	329	0.044	0.803
34	I get clarification and feedback without any delay from my superiors	329	0.047	0.851
35	Management shares important information with us in time	329	0.048	0.878
36	I get all the support from the organization whenever I need it	329	0.065	1.173
37	The management cares about its employees and the patients	329	0.061	1.112
38	I get adequate appraisals on time	329	0.068	1.238
39	I get adequate salary according to the work I do	329	0.063	1.137

**Table 3: Complete Descriptive Statistics**

Source: Estimated from primary data, Sept 17-jan 2018

**Interpretation:** This table shows the descriptive statistics based on the employee satisfaction in healthcare questionnaire giving higher mean values of the task and relationship based questions i.e. 4.43, 4.26, 4.24 of “I am aware of the hospital's mission and vision and my day to day activities are in tune with organization's vision and mission”, “I am aware of my job description”, “Trainings are being provided on organization's vision and mission”, respectively. And provides higher standard deviation statistics i.e. 1.238 on “I get adequate appraisals on time”.

S. No	Items	N	Mean
1	Management cares about its employees and patients.	329	3.2
2	I get all the support from the organization whenever I need it.	329	3.4

3	I am satisfied with overall welfare facilities for employees in the organization.	329	3.78
4	The management treats its employees with respect and dignity.	329	3.85
5	Employee grievance procedure of the organization is adequate and fair.	329	3.88
6	I am encourages to participate in organizational decision making process.	329	3.9
7	I get a feeling of personal satisfaction from my work.	329	3.95
8	I am satisfied with present working environment.	329	3.97
9	I would recommend it as a good place to work to my friends.	329	3.98
10	My supervisor or someone at work seems to care about me as a person	329	4.02
11	My supervisor encourages my suggestions and correct decisions are taken.	329	4.03
12	I receive proper guidance and feedback regarding my work.	329	4.04
13	Organization has a reputation of being fair and just.	329	4.08
14	I have a safe and secure work environment.	329	4.11
15	Trainings are being provided on organization's vision and mission	329	4.24
16	I am aware of the hospital's mission and vision and my day to day activities are in tune with the organization's vision and mission.	329	4.44

**Table 4: Descriptive Statistics of Organizational Role**

Source: Estimated from primary data, Sept-Jan 2018

**Interpretation:** This table describes the mean statistics of organization's role attribute. Here, the mean ranges from 3.20 - 4.44. The average mean is 3.929.

### b. Statistics of ESAT construct/ attribute: Pay and Compensation

S. No	Items	N	Mean
1	I was told clearly about my compensation and benefits when I joined this organization.	329	4.08
2	Increments and appraisals are fair and transparent.	329	3.54
3	I get adequate appraisals on time.	329	3.43
4	I get adequate salary according to the work I do.	329	3.36

**Table 5: Descriptive Statistics of Pay and Compensation**

Source: Estimated from primary data, Sept 2017

**Interpretation:** This table describes the mean statistics of Pay and Compensation attribute. Here, the mean ranges from 3.36 - 4.08. The average mean is 3.6025.

### c. Statistics of ESAT construct/ attribute: Relation with Co-Workers

S. No	Items	N	Mean
1	I can count on my team members for help and guidance	329	4.11
2	Team work is recognized and rewarded in our organization.	329	3.99
3	I get clarification and feedback without any delay from my superiors.	329	4.07
4	Management shares important information with us in time.	329	3.95

**Table 6: Descriptive Statistics of Relation with Co-Workers**

Source: Estimated from primary data, Sept 2017

**Interpretation:** This table describes the mean statistics of Relation with Co-Workers attribute. Here, the mean ranges from 3.95 - 4.11. The average mean is 4.03.

<b>d. Statistics of ESAT construct/ attribute: Promotion and Career Growth</b>			
<b>S. No</b>	<b>Items</b>	<b>N</b>	<b>Mean</b>
1	In the last six months, someone at work has talked to me about my progress.	329	3.74
2	My organization is dedicated and serious about my professional development.	329	3.84
3	Good work is appreciated and recognized in my organization.	329	3.86
4	My organization has a good reward and recognition program.	329	3.88
5	I feel free to share my view with my seniors and HOD	329	3.95
6	The leadership clearly shares organizational goals and challenges with employees.	329	3.99
7	I am aware of my job description.	329	4.26
8	I enjoy my work and challenges it provides.	329	4.09
9	My job encourages me to constantly improve my knowledge and skills.	329	4.19
10	I get training I need to do my job well	329	4.08
11	I have the opportunity to learn new skills which would help me to advance in my career.	329	4.12
12	I get proper leaves.	329	3.33
13	Management arranges several activities along with the designated job.	329	3.36
14	I feel happy and proud to work here.	329	4.14

**Table 7: Descriptive Statistics of Promotion and Career Growth**

Source: Estimated from primary data, Sept 2017-Jan 18

**Interpretation:** This table describes the mean statistics of Promotion and Career Growth attribute. Here, the mean ranges from 3.33 - 4.26. The average mean is 3.916.

### Factor Analysis

<b>S. No.</b>	<b>Factor</b>	<b>Component</b>			
		<b>F1- Pay &amp; Compensation</b>	<b>F2- promotion &amp; Career Growth</b>	<b>F3-Relation with Co-Workers</b>	<b>F4- Organisational Role</b>
1	I am aware of the hospital's mission and vision and my day to day activities are in tune with organization's vision and mission				.234
2	Trainings are being provided on organization's vision and mission				.332
3	Organization has a reputation of being fair and just				.354
4	I receive proper guidance and feedback regarding my work				.338
5	The management treats its employees with respect and dignity				.239
6	My supervisor or someone at work seems to care about me as a person				.338
7	I am encouraged to participate in organizational decision making process				.374

8	My supervisor encourages my suggestions and correct decisions are taken				.299
9	I am satisfied with overall welfare facilities for employees in the organization				.237
10	Employee grievance procedure of the organization is adequate and fair				.332
11	I would recommend it as a good place to work to my friends				.359
12	I get a feeling of personal satisfaction from my work				.289
13	I am satisfied with present working environment				.254
14	I have a safe and secure work environment				.382
15	I get all the support from the organization whenever I need it				.334
16	The management cares about its employees and the patients				.349
17	I was told clearly about my compensation and benefits when I joined this Organization	.836			
18	Increments and appraisals are fair and transparent	.883			
19	I get adequate appraisals on time	.789			
20	I get adequate salary according to the work I do	.942			
21	I can count on my team members for help and guidance			.537	
22	Team work is recognized and rewarded in our organization			.554	
23	I get clarification and feedback without any delay from my superiors			.580	
24	Management shares important information with us in time			.578	
25	In the last six months, someone at work has talked to me about my progress		.684		
26	My organization is dedicated and serious about my professional development		.662		
27	Good work is appreciated and recognized in my organization		.714		
28	My organization has a good reward and recognition program		.712		

29	I feel free to share my view with my seniors and HOD		.645		
30	The leadership clearly shares organizational goals and challenges with Employees		.670		
31	I am aware of my Job Description		.620		
32	I enjoy my work and challenges it provides		.639		
33	My job encourages me to constantly improve my knowledge and skills		.789		
34	I get the training I need to do my job well		.623		
35	I have the opportunity to learn new skills which would help me to advance in my career		.628		
36	I get proper leaves		.760		
37	Management arranges several activities along with the designated job		.639		
38	I feel happy and proud to work here		.699		

**Table 8: Principal Component Analysis**

Source: Estimated from primary data, Sept 2017-Jan 18

**Interpretation:** It is seen in this table variables 1, 2, 3, 4, 5, 6, 13, 14, 15, 16, 19, 20, 23, 24, 32, 33 loaded onto component 1. Variables 7, 8, 34, 35 loaded onto component 2. Variables 17, 18, 30, 31 loaded onto component 3 while variables 9, 10, 11, 12, 21, 22, 25, 26, 27, 28, 29, 36, 37, 38 loaded onto component 4. The four components were named Pay and Compensation, Promotion and Career Growth, Relation with Co-Workers and Organizational Role. Also it shows the maximum of the mean in Pay and Compensation component followed by Promotion and Career Growth then Relation with Co-Workers and in the last Organizational Role.

## Findings and Conclusion

This survey has provided the level of satisfaction of employees in healthcare with certain factors i.e. organizational Role, Pay and Compensation, Relation with Co-Workers, and Promotion and Career Growth. The results revealed that the satisfaction of employees possessed more of Pay and compensation, and the Organizational role in comparison to Promotion and career growth and Relation with co- workers. Also, the result revealed that e Relation with Co-Workers is important for employee satisfaction. It also revealed that employee satisfaction (ESAT) helps in becoming more mature and can acquire certain competencies that lead to outstanding

performance at workplace. According to John Stacey Adams (1965)–Equity Theory, employees seek to maintain equity between the inputs that they bring to a job and the outcomes that they receive from it against the perceived inputs and outcomes of others. The belief is that people value fair treatment which causes them to be motivated to keep the fairness maintained within the relationships of their co-workers and the organization the determinants of employee satisfaction includes Overall Individual satisfaction, Compensation and Benefits as this is the most important variable for employee satisfaction. Employees should be provided with competitive salary packages and they should be satisfied with it when comparing their pay packets with those of the outsiders who are working in the same industry. Nature of Work, Work Environment and Conditions, Job Content, Job Satisfaction, Organizational Level, Opportunities for Promotion, Work Group etc.

## Bibliography

- Chaulagain, N., & Khadka, D. K. (2012). Factors influencing job satisfaction among healthcare professionals at tilganga eye centre, Kathmandu, Nepal. International Journal of Scientific & Technology Research, 1(11), 32-36.
- Datta, P. P., & Datta, D. (2013). A study on motivation and satisfaction of employees in corporate hospitals in Kolkata, India. National Journal of Medical Research, 3(1), 56-59.

- Herzberg, F. (1968). Onemore time: How do you motivate employees?Harvard Business Review, 46(1), 53–62.
- Jathanna, R., Melisha, R. D., Mary, G., & Latha, K. S. (2011). Determinants of job satisfaction among healthcare workers at a tertiary care hospital.Online Journal of Healthand Allied Sciences, 10(3), 1-3.
- Kuzey, C. (2012). Impact of health care employees' job satisfaction on organizational performance support vector machine Approach. European Journal of Economic and Political Studies, 5(1),65-89.
- Lu, H., While, A. E., & Barriball, K. L. (2007). Job satisfaction and, its related factors: A questionnaire survey of hospital nurses in Mainland China. International Journal of Nursing Studies 44,574-588.
- Pietersen, C. (2005). Job satisfaction of hospital nursing staff. SA Journal of Human Resource Management, 3(2), 19-25.
- Robbins, S. P., DeCenzo, D. A., Bhattacharyya, S., & Agarwal, M. N. (2010). Essentials of Management. New Delhi: Pearson Education India
- Saari, L. M., & Judge, T. A. (2004). Employee attitudes and job satisfaction.Human Resource Management. 43(4), 395-407.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally.
- Sridharan, S., Liyanage, U., & Wickramasinghe, S. C. (2008). Keys to Job Satisfaction of Nursing Officers in Government Hospitals, Sri Lankan. Journal of Management, 13(3 & 4),97-124.
- Tyson, S. (2006). Essentials of Human Resource Management. Oxford: Elsevier Ltd.
- Wiess, D., Davis, R., Englnad, G., & Lofquist, L. I. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis: Industrial Relations Centre, University of Minnesota.
- Yafe, S. A. (2011). Assessing job satisfaction level of employees in a tertiary care hospital- A tool for talent retention. Zenith - International Journal of Multidisciplinary Research,1(8), 494-507.

# A Study on Investment Perception and Selection Behaviour towards Mutual Funds

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## Abstract

*A mutual fund is a scheme in which several people invest their money for a common financial cause. The collected money invests in the capital market and the money, which they earned, is divided based on the number of units, which they hold. The mutual fund industry started in India in a small way with the UTI Act creating what was effectively a small savings division within the RBI. Over a period of 25 years this grew fairly successfully and gave investors a good return, and therefore in 1989, as the next logical step, public sector banks and financial institutions were allowed to float mutual funds and their success emboldened the government to allow the private sector to foray into this area. The advantages of mutual fund are professional management, diversification, economies of scale, simplicity, and liquidity. The disadvantages of mutual fund are high costs, over-diversification, possible tax consequences, and the inability of management to guarantee a superior return.*

*The biggest problems with mutual funds are their costs and fees it include Purchase fee, Redemption fee, Exchange fee, Management fee, Account fee & Transaction Costs. There are some loads which add to the cost of mutual fund. Load is a type of commission depending on the type of funds. Mutual funds are easy to buy and sell. Investors can either buy them directly from the fund company or through a third party. Before investing in any funds, one should consider some factor like objective, risk, Fund Manager's and scheme track record, Cost factor etc.*

*There are many, many types of mutual funds. They can be classified as funds-based Structure (open-ended & close-ended), Nature (equity, debt, balanced), Investment objective (growth, income, money market) etc. Mutual Funds now represent perhaps most appropriate investment opportunity for most investors. As financial markets become more sophisticated and complex, investors need a financial intermediary who provides the required knowledge and professional expertise on successful investing. As the investor always try to maximize the returns and minimize the risk. Mutual fund satisfies these requirements by providing attractive returns with affordable risks. The fund industry has already overtaken the banking industry, more funds being under mutual fund management than deposited with banks. With the emergence of tough competition in this sector mutual funds are launching a variety of schemes which caters to the requirement of the particular class of investors. Risk takers for getting capital appreciation should invest in growth, equity schemes. Investors who are in need of regular income should invest in income plans.*

*It has been founded that Mutual Funds are more lucrative to male investors for investing their savings as compared to female investors as per this study we found that 57.1% have invested in mutual funds. People who are under the age group of 20-30 have more experience and are more interested in investing in Mutual Funds. People investing in mutual funds are mostly post graduates. There was lack of awareness or ignorance about mutual funds, that's why out of 101 people, 44 people have invested in Mutual Fund and 57 people are unaware Mutual Fund investments. Generally, People employed in Private sectors and Businessman are more likely to invest in Mutual Funds, if compared to people working in other professions. Generally, investors whose monthly income is above Rs. 20001-30000 are more likely to invest their income in Mutual Fund, to preserve their savings of at least more than 20%. People generally like to put their savings in Mutual Fund, Fixed Deposits and Savings Account. Most of the people invest in mutual funds in expectation of high returns. Many people came to know about Mutual Fund from newspaper and internet and they are least influenced by sales representatives while investing in mutual funds. ICICI is the most preferred Asset Management*

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*Company in comparison to SBI MF, Kotak MF, Reliance MF, UTI MF, HDFC MF etc. Investors generally take advice of financial advisors before investing in mutual funds.*

*The most popular medium of investing in Mutual Fund is through SIP and moreover people like to invest in Equity Fund though it is a risky game.*

*Many of the investors calculate Net Asset Value of funds before investing in Mutual Funds. Many people are not aware of investing through mutual fund apps. Many mutual fund investors have knowledge of mutual fund in which have invested only. Diversification of risk is the most lucrative benefit of investing in mutual funds as per this study.*

*Most of the people invest in mutual funds because according to them it is better to invest in mutual funds rather than directly investing in shares/debentures. As per this study no knowledge about how to invest in mutual funds is the important reason behind not investing in mutual funds. There is significant relationship between age of investors and their level of awareness of mutual funds. There is significant relationship between qualification of investors and their level of awareness of mutual funds.*

*There is significant relationship between investors who are aware of mutual funds operations and who actually invest in mutual funds. There is no significant relationship gender of investors and their level of awareness of mutual funds. There is no significant relationship occupation of investors and their level of awareness of mutual funds.*

*With the emergence of tough competition in this sector mutual funds are launching a variety of schemes which caters to the requirement of the particular class of investors. Risk takers for getting capital appreciation should invest in growth, equity schemes. Investors who are in need of regular income should invest in income plans.*

## Introduction

A Mutual fund is simply a financial intermediary that allows a group of investors to pool their money together with a predetermined investment objective. The mutual fund will have a fund manager who is responsible for investing the pooled money into specific securities (usually stocks or bonds). When investor invest in a mutual fund, they are buying shares (or portions) of the mutual fund and become a shareholder of the fund.

Mutual funds are one of the best investments ever created because they are very cost efficient and very easy to invest in. By pooling money together in a mutual fund, investors can purchase stocks or bonds with much lower trading costs.

A mutual fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciations realized are shared by its unit holders in proportion to the number of units owned by them. Thus, a Mutual Fund is the most suitable investment

for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.

Over the past decade, American investors increasingly have turned to mutual and exchange traded funds to save for retirement and other financial goals. Mutual and exchange traded funds can offer the advantages of diversification and professional management.

Different investment avenues are available to investors. Mutual and exchange traded funds also offer good investment opportunities to the investors. Like all investments, they also carry certain risks. The investors should compare the risks and expected yields after adjustment of tax on various instruments while taking investment decisions. The investors may seek advice from experts and consultants including agents and distributors of mutual and exchange traded funds schemes while making investment decisions. But, as with other investment choices, investing in mutual funds involves risk. And fees and taxes will diminish a fund returned pays to understand both the upsides and the downsides

of mutual fund investing and how to choose products that match your goals and tolerance for risk.

### Working of Mutual Funds:

- Investors purchase mutual fund shares from the fund itself (or through a broker for the fund) instead of from other investors on a secondary market, such as the New York Stock Exchange or Nasdaq Stock Market.
- The price that investors pay for mutual shares is the funds per share net asset value (NAV) plus any shareholder fees that fund impose at the time of purchase (such as sales loads).
- Mutual fund shares are “redeemable”, meaning investors can sell their shares back to the fund (or to a broker acting of the fund).
- Mutual funds generally create and sell new shares to accommodate new investors. In order words, they sell their shares on a continuous basis, although some funds stop selling when, for example, they too become large.
- The investment portfolios of mutual funds typically are managed by separate entities known as “investment advisers” that are registered with the SEC.

## 1.1 Industry Profile

### History of Indian Mutual Fund Industry

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank. The history of mutual funds in India can be broadly divided into four distinct phases.

**First Phase (1964-87):** Unit Trust of India (UTI) was established on 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs.6, 700 Crores of assets under management.

**Second Phase (1987-1993) (Entry of Public Sector Funds):** The year 1987 marked the entry of non- UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non- UTI Mutual Fund established in June 1987 followed by Can bank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund in June 1989 while GIC had set up its mutual fund in December 1990.

**Third Phase (1993-2003) (Entry of Private Sector Funds):** With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993. The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions.

**Fourth Phase – since February 2003:** In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of Rs.29,835 Crores as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs.76, 000 Crores of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.

## 1.2 Mutual Fund - An Introduction

Mutual Fund is where many investors contribute to form a common pool of money. This pool of money is invested in accordance with the objectives as stated in the Offer document. The ownership of the fund is thus joint or “mutual”; the fund belongs to all investors. A single investor’s ownership of the fund is in the same proportion as the amount of the contribution made by him bears to the total amount of the Fund. Investors of Mutual Funds are called ‘unit holders’.

To reduce the risk, the investments in securities are spread across a cross section of industries and sectors. As all stocks may not move in the same direction at the same time, diversification ensures reduced risk. Besides, Mutual Funds provide professional management, reduced transaction costs, liquidity, convenience and flexibility. The profits or losses are shared by the unit holders in proportion to their investments. All Mutual Funds are required to be registered with Securities and Exchange Board of India (SEBI) which is regulator of the securities market in India.

Mutual funds have a unique structure not shared with other entities such as companies or firms. India has a legal framework within which mutual funds must be constituted. A Mutual Fund in India is allowed to issue open end and close end schemes under common legal structure. Therefore, a Mutual Fund may have several different schemes (open and close end) at any point of time.

SEBI contemplated four-tier systems for managing the affairs of Mutual Funds ensuring arm’s length distance between the sponsor and the fund. The four constituents were the sponsoring company, the fund, the custodians and the asset management company.

## 1.3 Advantages of Mutual Funds

Following are the several benefits from investing in mutual funds.

1. **Professional Expertise:** Fund managers in mutual funds are professionals who track the markets on a minute-to-minute basis. With their mix of professional qualification and market knowledge, they are better placed than the average investor to understand the markets.

2. **Diversification:** Since a mutual fund scheme invests in a number of stocks or debentures, the attendant risks are greatly reduced. Even if the stock price of one of the companies goes down or company defaults on payment of interest, it does not result in a substantial loss to the investor, as the other holdings of the fund can compensate for this fall.
3. **Relatively inexpensive:** When compared to direct investments in the capital market, mutual funds cost less. This is due to savings in brokerage costs, demat costs, depository costs, etc.
4. **Liquidity:** Investments in mutual funds are completely liquid and can be redeemed at NAV related prices on any working day. Since these are bought back by the mutual fund itself, there is no risk of not finding a buyer. Besides redemption money can be received by the investor within a week.
5. **Transparency:** You will always have access to up-to-date information on the value of your investment in addition to the complete portfolio of investments that have been made by your scheme, the proportion allocated to different assets and the Fund Manager’s investment strategy.
6. **Flexibility:** Through features such as regular investment plans, regular withdrawal plans and dividend reinvestment plans, you can systematically invest or withdraw funds according to your needs and convenience. These are called Systematic Investment Plans (SIP) and Systematic Withdrawal Plans (SWP).

## 1.4 Disadvantages of Mutual Fund

### 1. Costs Control Not in the Hands of an Investor

Investor has to pay investment management fees and fund distribution costs as a percentage of the value of his investments (as long as he holds the units), irrespective of the performance of the fund.

### 2. No Customized Portfolios

The portfolio of securities in which a fund invests is a decision taken by the fund manager. Investors have no right to interfere in the decision-making process of a fund manager, which some investors find as a constraint in

achieving their financial objectives.

### 3. Difficulty in Selecting a Suitable Fund Scheme

Many investors find it difficult to select one option from the plethora of funds/schemes/plans available. For this, they may have to take advice from financial planners in order to invest in the right fund to achieve their objectives.

## 1.5 Types of Mutual Funds

### General Classification of Mutual Funds

**Open-end Funds:** Funds that can sell and purchase units at any point in time are classified as Open-end Funds. The fund size (corpus) of an open-end fund is variable (keeps changing) because of continuous selling (to investors) and repurchases (from the investors) by the fund. An open-end fund is not required to keep selling new units to the investors at all times but is required to always repurchase, when an investor wants to sell his units. The NAV of an open-end fund is calculated every day.

**Closed-end Funds:** Funds that can sell a fixed number of units only during the New Fund Offer (NFO) period are known as Closed-end Funds. The corpus of a Closed-end Fund remains unchanged at all times. After the closure of the offer, buying and redemption of units by the investors directly from the Funds is not allowed. However, to protect the interests of the investors, SEBI provides investors with two avenues to liquidate their positions:

1. Closed-end Funds are listed on the stock exchanges where investors can buy/sell units from/to each other. The trading is generally done at a discount to the NAV of the scheme. The NAV of a closed-end fund is computed on a weekly basis
2. Closed-end Funds may also offer "buy-back of units" to the unit holders. In this case, the corpus of the Fund and its outstanding units do get changed.

**Load Funds:** Mutual Funds incur various expenses on marketing, distribution, advertising, portfolio churning, fund manager's salary etc. Many funds recover these expenses from the investors in the form of load. These funds are known as Load Funds. A load fund may impose following types of loads on the investors:

- **Entry Load-** Also known as Front-end load, it refers to the load charged to an investor at the time of his entry into a scheme. Entry load is deducted from the investor's contribution amount to the fund.
- **Exit Load-** Also known as Back-end load, these charges are imposed on an investor when he redeems his units (exits from the scheme). Exit load is deducted from the redemption proceeds to an outgoing investor.
- **Deferred Load-** Deferred load is charged to the scheme over a period of time.
- **Contingent Deferred Sales Charge (CDSS)-** In some schemes, the percentage of exit load reduces as the investor stays longer with the fund. This type of load is known as Contingent Deferred Sales Charge.

**No-load Funds:** All those funds that do not charge any of the above-mentioned loads are known as No-load Funds.

Profits arising out of sale of units by an investor within 12 months of purchase are categorized as short-term capital gains, which are taxable. Sale of units of an equity-oriented fund is subject to Securities Transaction Tax (STT). STT is deducted from the redemption proceeds to an investor.

## 1.6 Broad Mutual Fund Types

### 1. Equity Funds

Equity funds are considered to be the riskier funds as compared to other fund types, but they also provide higher returns than other funds. It is advisable that an investor looking to invest in an equity fund should invest for long term i.e. for 3 years or more. There are different types of equity funds each falling into different risk bracket. In the order of decreasing risk level, there are following types of equity funds:

- **Aggressive Growth Funds-** In Aggressive Growth Funds, fund managers aspire for maximum capital appreciation and invest in less researched shares of speculative nature. Because of these speculative investments Aggressive Growth Funds become more volatile and thus, are prone to higher risk than other equity funds.
- **Speciality Funds-** Speciality Funds have stated criteria for investments and their portfolio comprises of only

those companies that meet their criteria. Criteria for some speciality funds could be to invest/not to invest in particular regions/companies. Speciality funds are concentrated and thus, are comparatively riskier than diversified funds. There are following types of speciality funds:

- (a) **Sector Funds:** Equity funds that invest in a particular sector/industry of the market are known as Sector Funds. The exposure of these funds is limited to a particular sector (say Information Technology, Auto, Banking, Pharmaceuticals or Fast-Moving Consumer Goods) which is why they are riskier than equity funds that invest in multiple sectors.
- (b) **Foreign Securities Funds:** Foreign Securities Equity Funds have the option to invest in one or more foreign companies. Foreign securities funds achieve international diversification and hence they are less risky than sector funds. However, foreign securities funds are exposed to foreign exchange rate risk and country risk.
- (c) **Mid-Cap or Small-Cap Funds:** Funds that invest in companies having lower market capitalization than large capitalization companies are called Mid-Cap or Small-Cap Funds. Market capitalization of Mid-Cap companies is less than that of big, blue chip companies (less than Rs. 2500 crores but more than Rs. 500 crores) and Small-Cap companies have market capitalization of less than Rs. 500 crores. Market Capitalization of a company can be calculated by multiplying the market price of the company's share by the total number of its outstanding shares in the market. The shares of Mid-Cap or Small-Cap Companies are not as liquid as of Large-Cap Companies which gives rise to volatility in share prices of these companies and consequently, investment gets risky.
- (d) **Option Income Funds:** While not yet available in India, Option Income Funds write options on a large fraction of their portfolio. Proper use of options can help to reduce volatility, which is otherwise considered as a risky instrument. These funds invest in big, high dividend yielding companies, and then sell options against their stock positions, which generate stable income for investors.
- **Equity Index Funds-** Equity Index Funds have the objective to match the performance of a specific stock market index. The portfolio of these funds comprises of the same companies that form the index

and is constituted in the same proportion as the index. Equity index funds that follow broad indices (like S&P CNX Nifty, Sensex) are less risky than equity index funds that follow narrow sectoral indices (like BSEBANKEX or CNX Bank Index etc.) Narrow indices are less diversified and therefore, are riskier.

- **Value Funds-** Value Funds invest in those companies that have sound fundamentals and whose share prices are currently under-valued. The portfolio of these funds comprises of shares that are trading at a low Price to Earnings Ratio (Market Price per Share / Earning per Share) and a low Market to Book Value (Fundamental Value) Ratio. Value Funds may select companies from diversified sectors and are exposed to lower risk level as compared to growth funds or speciality funds. Value stocks are generally from cyclical industries (such as cement, steel, sugar etc.) which make them volatile in the short-term. Therefore, it is advisable to invest in Value funds with a long-term time horizon as risk in the long term, to a large extent, is reduced.
- **Equity Income or Dividend Yield Funds-** The objective of Equity Income or Dividend Yield Equity Funds is to generate high recurring income and steady capital appreciation for investors by investing in those companies which issue high dividends (such as Power or Utility companies whose share prices fluctuate comparatively lesser than other companies' share prices). Equity Income or Dividend Yield Equity Funds are generally exposed to the lowest risk level as compared to other equity funds.

## 2. Debt / Income Funds

Funds that invest in medium to long-term debt instruments issued by private companies, banks, financial institutions, governments and other entities belonging to various sectors (like infrastructure companies etc.) are known as Debt / Income Funds. Debt funds are low risk profile funds that seek to generate fixed current income (and not capital appreciation) to investors. In order to ensure regular income to investors, debt (or income) funds distribute large fraction of their surplus to investors. Although debt securities are generally less risky than equities, they are subject to credit risk (risk of default) by the issuer at the time of interest or principal payment. To minimize the risk of default, debt funds usually invest in securities



from issuers who are rated by credit rating agencies and are considered to be of "Investment Grade". Debt funds that target high returns are riskier. Based on different investment objectives, there can be following types of debt funds:

- **Diversified Debt Funds-** Debt funds that invest in all securities issued by entities belonging to all sectors of the market are known as diversified debt funds. The best feature of diversified debt funds is that investments are properly diversified into all sectors which results in risk reduction. Any loss incurred, on account of default by a debt issuer, is shared by all investors which further reduces risk for an individual investor.
- **High Yield Debt funds-** As we now understand that risk of default is present in all debt funds, and therefore, debt funds generally try to minimize the risk of default by investing in securities issued by only those borrowers who are considered to be of "investment grade". But High Yield Debt Funds adopt a different strategy and prefer securities issued by those issuers who are considered to be of "below investment grade". The motive behind adopting this sort of risky strategy is to earn higher interest returns from these issuers. These funds are more volatile and bear higher default risk, although they may earn at times higher returns for investors.
- **Assured Return Funds-** Although it is not necessary that a fund will meet its objectives or provide assured returns to investors, but there can be funds that come with a lock-in period and offer assurance of annual returns to investors during the lock-in period. Any shortfall in returns is suffered by the sponsors or the Asset Management Companies (AMCs). These funds are generally debt funds and provide investors with a low-risk investment opportunity. However, the security of investments depends upon the net worth of the guarantor (whose name is specified in advance on the offer document). To safeguard the interests of investors, SEBI permits only those funds to offer assured return schemes whose sponsors have adequate net-worth to guarantee returns in the future. In the past, UTI had offered assured return schemes (i.e. Monthly Income Plans of UTI) that assured specified returns to investors in the future. UTI was not able to fulfill its promises and faced large shortfalls in returns.

Eventually, government had to intervene and took over UTI's payment obligations on itself. Currently, no AMC in India offers assured return schemes to investors, though possible.

- **Fixed Term Plan Series-** Fixed Term Plan Series usually are closed-end schemes having short term maturity period (of less than one year) that offer a series of plans and issue units to investors at regular intervals. Unlike closed-end funds, fixed term plans are not listed on the exchanges. Fixed term plan series usually invest in debt / income schemes and target short-term investors. The objective of fixed term plan schemes is to gratify investors by generating some expected returns in a short period.

### 3. Gilt Funds

Also known as Government Securities in India, Gilt Funds invest in government papers (named dated securities) having medium to long term maturity period. Issued by the Government of India, these investments have little credit risk (risk of default) and provide safety of principal to the investors. However, like all debt funds, gilt funds too are exposed to interest rate risk. Interest rates and prices of debt securities are inversely related and any change in the interest rates results in a change in the NAV of debt/gilt funds in an opposite direction.

### 4. Money Market / Liquid Funds

Money market / liquid funds invest in short-term (maturing within one year) interest bearing debt instruments. These securities are highly liquid and provide safety of investment, thus making money market / liquid funds the safest investment option when compared with other mutual fund types. However, even money market / liquid funds are exposed to the interest rate risk. The typical investment options for liquid funds include Treasury Bills (issued by governments), Commercial papers (issued by companies) and Certificates of Deposit (issued by banks).

### 5. Hybrid Funds

As the name suggests, hybrid funds are those funds whose portfolio includes a blend of equities, debts and money market securities. Hybrid funds have an equal proportion of debt and equity in their portfolio. There are following types of hybrid funds in India:

- **Balanced Funds-** The portfolio of balanced funds include assets like debt securities, convertible securities, and equity and preference shares held in a relatively equal proportion. The objectives of balanced funds are to reward investors with a regular income, moderate capital appreciation and at the same time minimizing the risk of capital erosion. Balanced funds are appropriate for conservative investors having a long-term investment horizon.
- **Asset Allocation Funds-** Mutual funds may invest in financial assets like equity, debt, money market or non-financial (physical) assets like real estate, commodities etc. Asset allocation funds adopt a variable asset allocation strategy that allows fund managers to switch over from one asset class to another at any time depending upon their outlook for specific markets. In other words, fund managers may switch over to equity if they expect equity market to provide good returns and switch over to debt if they expect debt market to provide better returns. It should be noted that switching over from one asset class to another is a decision taken by the fund manager on the basis of his own judgment and understanding of specific markets, and therefore, the success of these funds depends upon the skill of a fund manager in anticipating market trends.

## 6. Commodity Funds

Those funds that focus on investing in different commodities (like metals, food grains, crude oil etc.) or commodity companies or commodity futures contracts are termed as Commodity Funds. A commodity fund that invests in a single commodity or a group of commodities is a specialized commodity fund and a commodity fund that invests in all available commodities is a diversified commodity fund and bears less risk than a specialized commodity fund. "Precious Metals Fund" and Gold Funds (that invest in gold, gold futures or shares of gold mines) are common examples of commodity funds.

## 7. Fund of Funds

Mutual funds that do not invest in financial or physical assets, but do invest in other mutual fund schemes offered by different AMCs, are known as Fund of Funds. Fund of Funds maintain a portfolio comprising of units of other mutual fund schemes, just like conventional mutual funds maintain a portfolio comprising of equity/debt/

money market instruments or non-financial assets. Fund of Funds provide investors with an added advantage of diversifying into different mutual fund schemes with even a small amount of investment, which further helps in diversification of risks. However, the expenses of Fund of Funds are quite high on account of compounding expenses of investments into different mutual fund schemes

## Literature Review

Dr. Binod Kumar Singh (2012) has studied the impacts of various demographic factors on investors' attitude towards mutual fund. For measuring various phenomena and analyzing the collected data effectively and efficiently for drawing sound conclusions, Chi-square () test has been used and for analyzing the various factors responsible for investment in mutual funds, ranking was done on the basis of weighted scores and scoring was also done on the basis of scale. The study shows that most of respondents are still confused about the mutual funds and have not formed any attitude towards the mutual fund for investment purpose. It has been observed that most of the respondents having lack of awareness about the various function of mutual funds. Moreover, as far as the demographic factors are concerned, gender, income and level of education have significantly influenced the investors' attitude towards mutual funds. On the other hand, the other two demographic factors like age and occupation have not been found influencing the attitude of investors' towards mutual funds. As far as the benefits provided by mutual funds are concerned, return potential and liquidity have been perceived to be most attractive by the investors' followed by flexibility, transparency and affordability. Apart from the above, in India there is a lot of scope for the growth of mutual fund International Journal of Research in Management ISSN 2249-5908 Issue2, Vol. 2 (March-2012) Page 68 companies provided that the funds satisfy everybody's needs and sharp improvements in service standards and disclosure.

Gaurav Agrawal & Dr. Mini Jain (2013) found that in today's competitive environment, different kinds of investment avenues are available to the investors. All investment modes have advantages & disadvantages. An investor tries to balance these benefits and shortcomings of different investment modes before investing in them. Among various investment modes, Mutual Fund is the most suitable investment mode for the common man, as it offers an opportunity to invest in a diversified and professionally



managed portfolio at a relatively low cost. In this paper, an attempt is made to study mainly the investment avenue preferred by the investors of Mathura, and we have tried to analyze the investor's preference towards investment in mutual funds when other investment avenues are also available in the market.

Dr. Shantan Mehta, Charmi Shah (2013) has undertaken a survey of 100 educated investors of Ahmedabad and Baroda city and the major findings reveal the major factors that influence buying behavior mutual funds investors, sources that investor rely more while making investment and preferable mode to invest in mutual funds market. The study will be immensely useful to the AMC's, Brokers, distributors and to the other potential investors and last but not least to academicians.

Prof Gauri Prabhu, Dr N.M. Vechalekar (2014) observe that Mutual Funds provide a platform for a common investor to participate in the Indian capital market with professional fund management irrespective of the amount invested. The Indian mutual fund industry is growing rapidly and this is reflected in the increase in Assets under management of various fund houses. Mutual fund investment is less risky than directly investing in stocks and is therefore a safer option for risk averse investors. Monthly Income Plan funds offer monthly returns and invest majorly in debt-oriented instruments with little exposure to equity. However, it has been observed that most of the investors are not aware of the benefits of investment in mutual funds. This is reflected from the study conducted in this research paper. This paper makes an attempt to identify various factors affecting perception of investors regarding investment in Mutual funds. The findings understand the level of investor's preference, a survey was conducted taking in to consideration various parameters involved in investors decision making. For the purpose of evaluation, a questionnaire survey method was selected keeping in mind objectives of the study. The data was collected from primary and secondary sources. The primary sources were collected from the investors who invested in various avenues. The secondary sources are from books, journals and internet. Since the investor population is vast a sample size of 150 was taken for the project. The data was analyzed using the statistical tools like percentage analysis, chi square, weighted average. The report was concluded with findings and suggestions and summary. From the findings, it was inferred overall that the investor is highly concerned about safety and growth

and liquidity of investments. Most of the respondents are highly satisfied with the benefits and the service rendered by the reliance mutual funds.

Dr. Geeta Kesavaraj (2015) carried out the study with the aim to measure the —Customer Perception towards various types of Mutual Funds". It focuses its attention towards the possibilities of measuring the expectations and satisfaction level of more mutual fund products. It also aims to suggest techniques to improve the present level of perception. The study will help the firm in understanding the expectations, future needs and requirements and complaints of the consumers. The study had been dedicated mainly towards the promotion of product or concept in the Chennai Market. The researcher used the Descriptive type of research design in her study. The researcher used the Primary data collection method in her study by framing a structured Questionnaire. The researcher went with convenient type of sampling method in her study. The sample is taken as 204 by the researcher. For the purpose of Analysis and Interpretation the researcher used the following statistical tools namely Simple Percentage Analysis, Chi-Square Test, Karl Pearson's Correlation and One-way Anova. Based on the Analysis and Interpretation the researcher arrived out with the major findings in her study and Suggestions are given in such a way so that the customers can attain the wealth maximization.

Y. Prabhavathi, N.T. Krishna Kishore (2015) found out that the advent of Mutual Funds changed the way the world invested their money. The start of Mutual Funds gave an opportunity to the common man to hope of high returns from their investments when compared to other traditional sources of investment. The main focus of the study is to understand the attitude, awareness and preferences of mutual fund investors. Most of the respondents prefer systematic investment plans and got their source of information primarily from banks and financial advisors. Investors preferred mutual funds mainly for professional fund management and better returns and assessed funds mainly through Net Asset Values and past performance.

Pritam P. Kothari & Shivganga C. Mindargi (2016) carried out the study which analyzes the impact of different demographic variables on the attitude of investors towards mutual funds. Apart from this, it also focuses on the benefits delivered by mutual funds to investors. To this end, 200 respondents of Solapur City, having different demographic profiles were surveyed. The study reveals

that the majority of investors have still not formed any attitude towards mutual fund investments.

Priti Mane (2016) explains about investors' awareness towards mutual funds, investor perceptions, their preferences and the extent of satisfaction towards mutual funds.

A mutual fund is a type of professionally-managed collective investment vehicle that pools money from many investors to purchase securities. As there is no legal definition of mutual fund, the term is frequently applied only to those collective investments that are regulated, available to the general public and open-ended in nature. Mutual funds have both advantages and disadvantages compared to direct investing in individual securities. Today they play an important role in household finances. So, the present study aims at consumer behavior towards mutual funds with special reference to ICICI Prudential Mutual Funds Limited, Vijayawada. Data was collected through primary and secondary sources. Primary data was collected through structured questionnaire. Convenience sampling method was used to collect the data and entire study was conducted in Vijayawada City. Some suggestions were also made to increase the awareness towards mutual funds and measures to select appropriate mutual funds to maximize the returns.

## Objective of the Project

### Primary Objective:

- To analyze and find out various investment parameter and their importance in mutual fund scheme.

### Secondary Objective:

- To analyze the investor's preference towards investment in mutual funds when other investment avenues are also available in the market.
- To find the main bases of different investment avenues, an investor thinks before Investing.
- To evaluate the awareness of investors about the investing parameters in Mutual Funds.
- To find out the primary sources of information about Mutual Funds.

- To find out the investment pattern of investors.
- To find out the reasons of not investing in Mutual Funds.

## Scope of the Study

Now a day's financial markets are appeared as more efficient and significant to fight against inflation, mutual funds as a part of financial markets become popularized among investors because of their convenient nature and they also facilitates easy operations with good returns. Though they are not favored by many other investors as they are more depend upon volatile stock markets and struggling hard to differentiate product range to satisfy retail investor. It is thus, timed to understand and analyses investor's perception and expectations, and expose some too valuable information to defend financial decision making of mutual fund investor and asset management companies. Financial markets are becoming more extensive with wide-ranging financial products trying innovations in designing mutual funds portfolio but these changes need unification in correspondence with investor's expectations. Thus, it has become imperative to study mutual funds from a different angle, which is to focus on investor's perception and expectations and disclose the incognito parameters that are ascribed for their discontentment. This research paper focused attention on number of factors that highlights investors' perception about mutual funds. It was found that mutual funds were not that much known to investors, still investor rely upon bank and post office deposits, most of the investor used to invest in mutual fund for not more than 3 years and they used to quit from the fund which were not giving desired results. Equity option and SIP mode of investment were on top priority in investors' list. It was also found that maximum number of investors did not analyze risk in their investment and they were depending upon their broker and agent for this work.

## Research Methodology

The present research study strictly adides by conceptual frame work of research process. All elements in various stages of research process are explained hereafter. Secondary data, the detailed information from publications, internal records, books, magazines, journals, web services. Primary data, it is the detailed information from respondents.

**4.1 Selection of Sample size/Frame:** For this study Non -Probability sampling techniques were used. The convenience sampling and purposive sampling was used as maximum number of questionnaires was sent to professionals such as CA, CS, ICWA and CPA having knowledge of Mutual Funds. Sampling frame consists of 150 individuals in Delhi NCR out of which only 140 responded. Few questionnaires were incomplete so they need to be discarded.

**4.2 Tools for the data collection:** For the purpose of the study primary data was collected by questionnaires by sending the link of the questionnaire on the email ids of the individual, created with the help of Google Forms and also the link is shared on social media such as WhatsApp and Facebook. The questionnaire consists of total 22 questions. Multiple choice questions provide more than two (2) choices to express the investor's view. The questionnaire consists of both open ended and close ended questions.

**4.3 Statistical Analysis:** Before performing the statistical analysis, Data cleaning was done as responses to few questions were missing. By applying the one sample Kolmogorov –Smirnov Test we come to the conclusion that the data is not normally distributed, so non parametric tests need to be applied. The descriptive statistics frequency distribution is applied to understand the demographic profile of investors.

**4.4 Research Instrument and statistical tools for the Study:** In order to analyze the response from the respondents, structured questionnaire is used. The data collected from the respondents is recorded in SPSS software. Descriptive statistics and cross tab had been used in order to fulfill the different objective of the study.

### Hypothesis Testing:

Following Null Hypothesis can be framed

- There is no significant relationship between gender of respondents and their level of awareness about Mutual Fund Investments.
- There is no significant relationship between age of respondents and their level of awareness about Mutual Fund Investments.
- There is no significant relationship between qualification of respondents and their level of

awareness about Mutual Fund Investments.

- There is no significant relationship between occupation of respondents and their level of awareness about Mutual Fund Investments.
- There is no significant relationship between investors aware of mutual funds and investing their savings in Mutual Fund Scheme.

Chi-Square can be applied to test these associations.

- Descriptive statistics can be used to analyze the demographic profile of investors.
- Factor analysis to find out the factors which are most important for investors in Mutual Fund industry.

### Chi-Square Test

The chi square analysis is used for determining the relationship between an independent variable & a dependent variable.

The formula used is:

$$\text{Chi-Square} = \sum (O-E)^2/E$$

Where, O = observed frequency.

E = expected frequency.

The calculated value of Chi- Square is compared with the table value of Chi- Square for the given degrees of freedom at specified level of significance. If the calculated value is greater than the table value the difference between theory and observation is considered to be significant. If the calculated value is less than the table value the difference between theory and observation is not considered to be significant.

### Data Analysis and Interpretation Analysis of Investors' Behaviour

The current study analyses the investors' behavior as one of its objectives is to study the behavior of Indian individual investors towards the investment of their savings and the other is to study their (investors') perception towards the investment in mutual funds. For fulfilling these objectives, behavior of investors towards mutual funds and other investment options have been analyzed and a

comparative analysis of mutual funds with respect to other investment options has been performed with the help of primary data. The data was collected from two types of investors i.e., mutual fund investors (MFI) and non-mutual fund investors (NMFI). The researcher has obtained final response from 44 MFI and 57 NMFI.

The researcher has divided demographic data into six broad categories viz., annual income, annual savings, and age of investors, gender, qualification and profession.

Table-1 represents profile characteristics of respondents.

S. No.	Group	Respondent's characteristics	Number of respondents	Percentage
1.	Gender	Male	80	57.14
		Female	60	42.80
2.	Age	Less than 20 yrs.	5	3.60
		20-30 yrs.	106	75.70
		30-40 yrs.	20	14.30
		More than 40 yrs.	9	6.40
3.	Qualification	Matriculation	4	2.9
		12 <sup>th</sup> Standard	10	7.1
		Graduation	49	35
		Post-Graduation	50	35.7
		Professional/ Technical Qualification	27	19.3
4.	Occupation	Government Employee	6	4.3
		Professional	16	11.40
		Pvt Firm Employee	30	21.40
		Business Person	23	16.40
		Student	65	46.40
5	Income	Below 1 lac	60	42.9
		Between 1-2 lacs	12	8.6
		Between 2-3 lacs	16	11.4
		Between 3-4 lacs	21	15
		Between 4-5 lacs	15	10.7
		Above 5 lacs	16	11.4
6.	Savings	<= 25%	69	49.3
		<= 50%	23	16.4
		<= 75%	7	5
		More than 75%	41	29.3
7.	Avenues available for investment of savings	Savings Bank	58	41.4
		FD	27	19.3
		Shares/ Debentures	20	14.3
		Gold/Silver	06	4.3
		Postal Savings	04	2.9

		Real Estate	10	7.1
		Mutual Funds	12	8.6
		Insurance	03	2.1
8.	Factors found relevant for investing purpose	Liquidity	29	17.1
		High Return	52	37.1
		Low Risk	27	19.3
		Safety	33	23.6
		Marketability	4	2.9
9.	No. of respondents aware about Mutual Funds	Yes	89	63.6
		No	51	36.4
11.	No. of respondents invested in Mutual Funds	Yes	44	31.4
		No	54	40.7
12.	Types of Mutual Funds	SBI MF	11	7.9
		UTI MF	5	3.6
		HDFC MF	10	7.1
		Reliance MF	04	2.9
		KOTAK MF	09	6.4
		ICICI MF	19	13.6
13.	Channel preference for investment	Financial Advisor	32	22.9
		Bank	30	21.4
		AMC	26	18.6
14.	Investment Pattern	Monthly (SIP)	32	22.9
		Once in six months	15	10.7
		Once in a year	13	9.3
		Very Rare	22	15.7
15.	Mutual Fund Category	Debt	7	5
		Equity	35	25
		Hybrid	21	15
16.	Basis of selection of Mutual Funds	NAV	26	18.6
		Rating by CRICIL, ICRA	21	15
		AMC	7	5
		Expert Advice	18	12.9
17.	Usage of Mutual Funds	Yes	28	20
		No	54	38.6
18.	Knowledge of mutual funds	Totally ignorant	14	10
		Partial Knowledge of Mutual Funds	33	23.6
		Aware of the scheme in which you have invested	25	17.9

		Fully Aware	10	7.1
19.	Advantages of Mutual Funds	Professional Management	4	2.9
		Diversification	18	12.1
		Return Potential	13	9.3
		Low cost	3	2.1
		Liquidity	3	2.1
		Transparency	6	4.3
		Flexibility	8	5.7
		Choice of schemes	4	2.9
		Tax Benefits	11	7.9
		Well Regulated	5	3.6
20.	Reasons for investment	It's a good investment instrument	11	7.9
		It is better to invest in MF rather than investing in Shares and debentures directly	16	11.4
		They give assured and consistent result	14	10
		They provide high risk with low return	01	0.7
		Less calculation is required before investing when compared to share market	07	5
		Very simple to invest & monitor fund performance son a regular basis.	08	5.7
		MF provide benefit of cheap access to expensive stocks	11	7.9
21.	Reasons for not opting for Mutual Funds	It's not a lucrative investment instrument	10	7.1
		No satisfactory ROI when compared to other investment instruments	11	7.9
		No safety for funds invested	16	11.4
		Risky investment instrument	12	8.6
		No/Less Liquidity	2	1.4
		No Knowledge	33	23.6
		Others	17	12.1

**Note: Total number of respondents is 140**

**1. Gender of Respondents:****Interpretation**

In the above table it has been found out that there are 60 female respondents and 80 male respondents. So, it can be said that male respondents are more in number while compared to female respondents.

**2. Age of Respondents****Interpretation**

In the above table it has been found that majority of people are falling in the age group of 20-30 years as there are 106 respondents in this category out of 140 respondents. There are 20 respondents in 30-40 age group, 9 respondents in 40-50 age group and there are only 5 respondents who are below 20 years of age.

**3. Qualification****Interpretation**

In the above table it has been found that majority of respondents are post graduate as there are 50 respondents in this category. There are 27 professionals, 49 graduates, 4 metric pass and 10 respondents are 12 the pass respectively.

**4. Occupation of Respondents****Interpretation**

From the above table it has been found that majority of respondents are students, thereafter 30 are private firm employees and 6 government employee, 16 professionals, 23 business people respectively.

**5. Annual Income of Respondents****Interpretation:**

In the above table it is being noticed that most of the people have income less than Rs. 100,000 as there are 60 respondents who have income below 1 lac and this is because majority of them are students.

**6. Savings of Respondents****Interpretation**

In the above table it has been found that majority of people save less than 25% of their total income. There are 23 respondents who save less than 50% and only 7 respondents who save less than 75%.

**7. Avenues Available For Investment of Savings:****Interpretation**

It has been found that majority of respondents keep their savings in saving bank as there are 58 respondents in this category. Thereafter respondents invest in FD as there are 27 respondents in this category. Insurance is the least lucrative option as there are only 3 respondents in this category.

**8. Factors Preferred While Investing by Respondents****Interpretation**

In the above table it has been found that majority of people invest in order to get high returns as there are 52 respondent who do investment in return of high returns. Marketability is the least preferred factor by the respondents.

**9. Mutual Fund Awareness Among Respondents****Interpretation**

In the above table it has been found that majority of respondents are aware of mutual funds in Delhi NCR region.

**10. Primary Sources of Mutual Fund Awareness**

Table 5.10 (a) Which are the primary sources of your knowledge about mutual funds as an investment option? Corresponding to your choices how would you rate their influence on your final Mutual Fund Purchase decision? 1 is the lowest and 5 is the highest rating. [Television]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Least Influential	13	9.3	16.9	16.9
	Less Influential	12	8.6	15.6	32.5
	Neutral	18	12.9	23.4	55.8
	More Influential	20	14.3	26.0	81.8
	Most Influential	14	10.0	18.2	100.0
Missing	Total	77	55.0	100.0	
	System	63	45.0		
Total		140	100.0		



**Interpretation**

Respondents are of the opinion that Television is more influential as compared to rest of the options.

Table 5.10 (b) Which are the primary sources of your knowledge about mutual funds as an investment option? Corresponding to your choices how would you rate their influence on your final Mutual Fund Purchase decision? 1 is the lowest and 5 is the highest rating. [Internet]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Least Influential	18	12.9	20.0	20.0
	Less Influential	17	12.1	18.9	38.9
	Neutral	22	15.7	24.4	63.3
	More Influential	22	15.7	24.4	87.8
	Most Influential	11	7.9	12.2	100.0
	Total	90	64.3	100.0	
Missing	System	50	35.7		
	Total	140	100.0		

**Interpretation**

Respondents are more or less neutral in case of internet.

Table 5.10(c): Which are the primary sources of your knowledge about mutual fund as an investment option? Corresponding to your choices how would you rate their influence on your final Mutual Fund Purchase decision? 1 is the lowest and 5 is the highest rating. [Newspaper/ Journal]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Least Influential	22	15.7	26.2	26.2
	Less Influential	11	7.9	13.1	39.3
	Neutral	16	11.4	19.0	58.3
	More Influential	29	20.7	34.5	92.9
	Most Influential	6	4.3	7.1	100.0
Missing	Total	84	60.0	100.0	
	System	56	40.0		
Total		140	100.0		

**Interpretation:**

Newspapers are more influential then rest of sources of knowledge.

Table 5.10(d): Which are the primary sources of your knowledge about mutual fund as an investment option? Corresponding to your choices how would you rate their influence on your final Mutual Fund Purchase decision? 1 is the lowest and 5 is the highest rating. [Friends/Relatives]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Least Influential	23	16.4	29.9	29.9
	Less Influential	13	9.3	16.9	46.8
	Neutral	16	11.4	20.8	67.5
	More Influential	19	13.6	24.7	92.2
	Most Influential	6	4.3	7.8	100.0
	Total	77	55.0	100.0	
Missing	System	63	45.0		
	Total	140	100.0		

**Interpretation:**

According to respondent's sales representative are least influential.

**11. Number of respondents invested in mutual funds****Interpretation**

In the above table it is been found that majority of people have not invested in mutual funds as there are 57 respondents in this category.

**12. Type of mutual fund invested****Interpretation**

It is found that majority of investors invest in ICICI Mutual funds besides SBI, UTI, HDFC, Reliance, Kotak.

**13. Channel preferred by investors:****Interpretation**

It has been found that financial advisor is the most preferred channel by investors.

#### 14. Frequency of investment by investors:

Interpretation

It has been found that majority of investors invest on monthly basis in Mutual Funds.

#### 15. Type of mutual fund preferred:

Interpretation

Majority of investors have invested in Equity Mutual Funds as there 35 investors out of 63 people.

#### 16. Factors considered before investing in mutual funds

Interpretation

Majority of investors use NAV of assets before investing in Mutual Funds.

#### 17. Usage of mutual fund apps by investors:

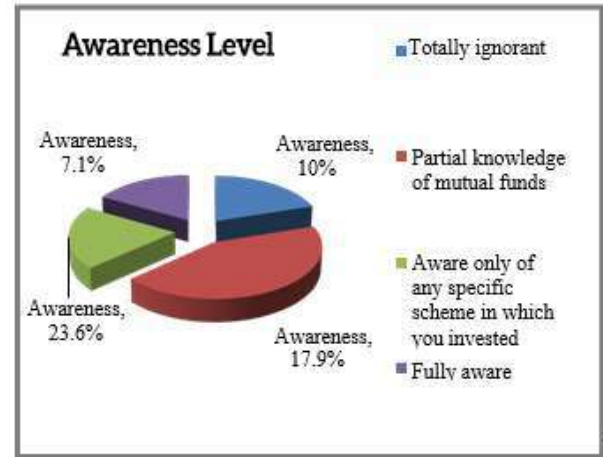
Interpretation

It has been found that only 28 investors have used mutual fund apps for investment.

#### 18. Knowledge of Mutual fund schemes

Interpretation

It has been found that only 23.6% have partial knowledge of Mutual Funds, 7.1% have fully aware of the scheme in which they invested and 10% respondents are totally ignorant of the scheme of mutual funds.



#### 19. Advantages of Mutual Funds

Interpretation

In the above table it has been found that diversification is the most important advantage of investing in mutual funds.

#### 20. Reasons for investment in Mutual Funds

Interpretation

In the above table it has been found according to majority of investors the reason behind their investment in mutual funds is that they considered mutual funds as better option to invest rather than investing in shares and debentures directly.

#### 21. Reasons for not investing in Mutual Funds

Interpretation

In the above table it has been found that the reason behind not investing in mutual fund is that respondents have no knowledge how to invest 23.6% have opted for this reason.

Profile of the Respondents	Awareness of Mutual Funds				Chi-Square	Chi-Square Test Statistic
	Totally Ignorant	Partial Knowledge	Aware of the scheme in which they have invested	Fully aware		
<b>1. Gender</b>						0.128
Male	20%	32%	38%	10%		
Female	12.5%	53.1%	18.8%	15.6%		
<b>2. Age</b>						0.038
Less than 20 yrs.	50%	0%	0%	50%		
Between 20-30 yrs.	19.7%	47.5%	24.6%	8.2%		

<b>3. Qualification</b>						0.038
<b>12<sup>th</sup> Standard</b>	25%	25%	25%	25%		
<b>Graduation</b>	29.2%	41.7%	20.8%	8.3%		
<b>Post-graduation</b>	14.3%	54.3%	20%	11.4%		
<b>Professional</b>	5.3%	15.8%	63.2%	15.8%		
<b>4. Occupation</b>						
<b>Government Employee</b>	0%	0%	50%	50%		0.112
<b>Professionals</b>	16.7%	16.7%	41.7%	25%		
<b>Private Firm Employees</b>	21.1%	47.4%	15.8%	15.8%		
<b>Business person</b>	25%	18.8%	43.8%	12.5%		
<b>Students</b>	12.1%	57.8%	27.3%	3.0%		

1. H0: There is no significant relationship between gender of investors and their level of awareness about Mutual Funds.

H1: There is significant relationship between genders of investors and their level of awareness about Mutual Funds.

#### Interpretation

As per this table we are accepting the null hypothesis because of the expected frequencies more than 0.05. So, we can say that there is no significant relationship between gender of investors and their level of awareness about Mutual Funds.

2. H0: There is no significant relationship between age of investors and their level of awareness about Mutual Funds.

H1: There is significant relationship between ages of investors and their level of awareness about Mutual Funds.

#### Interpretation

As per this table we are rejecting the null hypothesis because of the expected frequencies less than 0.05. So, we can say that there is significant relationship between age of investors and their level of awareness about Mutual funds.

3. H0: There is no significant relationship between qualification of Investors and their level of awareness about Mutual Funds.

H1: There is significant relationship between qualifications of investors and their level of awareness about Mutual Funds.

#### Interpretation

As per the table we are rejecting the null hypothesis because expected frequencies are less than 0.05. So, we can say that there is significant relationship between qualification of investors and their level of mutual fund awareness.

4. H0: There is no significant relationship between occupation of investors and their level of awareness about Mutual Funds.

H1: There is significant relationship between occupations of investors and their level of awareness about Mutual Funds.

#### Interpretation

As per above table we are accepting the null hypothesis because of the expected frequencies more than 0.05. So, we can say that there is no significant relationship between occupation of investors and their level of awareness about Mutual Funds.

5. H0: There is no significant relationship between investor aware of mutual funds operation and investing their savings in mutual funds itself.

H1: There is no significant relationship between investor aware of mutual funds operation and investing their savings in mutual funds itself.

Are you aware of mutual fund operations and their operations? \* Have you ever invested in mutual funds? Crosstabulation

			12. Have you ever invested in 7?		Total
			Yes	No	
10. Are you aware of Mutual funds and their operations? I		Count	43	45	88
	Yes	Expected Count	38.3	49.7	88.0
		Count	1	12	13
	No	Expected Count	5.7	7.3	13.0
		Count	44	57	101
Total		Expected Count	44.0	57.0	101.0

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.809a	1	.005		
Continuity Correction	6.224	1	.013		
Likelihood Ratio	9.338	1	.002		
Fisher's Exact Test				.006	.004
Linear-by-Linear Association	7.732	1	.005		
N of Valid Cases	101				

- (a) 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.66.
- (b) Computed only for a 2x2 table
- Generally, investors whose monthly income is above Rs. 20001-30000 are more likely to invest their income in Mutual Fund, to preserve their savings of at least more than 20%.

## Findings

Through this Project the results that was derived are-

- Mutual Funds are more lucrative to male investors for investing their savings as compared to female investors as per this study we found that 57.1% have invested in mutual funds.
- People who are under the age group of 20-30 have more experience and are more interested in investing in Mutual Funds.
- People investing in mutual funds are mostly post graduates.
- There was lack of awareness or ignorance about mutual funds, that's why out of 101 people, 44 people have invested in Mutual Fund and 57 people are unaware Mutual Fund investments.
- Generally, People employed in Private sectors and Businessman are more likely to invest in Mutual Funds, if compared to people working in other professions.
- People generally like to put their savings in Mutual Fund, Fixed Deposits and Savings Account.
- Most of the people invest in mutual funds in expectation of high returns.
- Many people came to know about Mutual Fund from newspaper and internet and they are least influenced by sales representatives while investing in mutual funds.
- ICICI is the most preferred Asset Management Company in comparison to SBI MF, Kotak MF, Reliance MF, UTI MF, HDFC MF etc.
- Investors generally take advice of financial advisors before investing in mutual funds.
- The most popular medium of investing in Mutual Fund is through SIP and moreover people like to invest in Equity Fund though it is a risky game.
- Many of the investors calculate Net Asset Value of funds before investing in Mutual Funds.
- Many people are not aware of investing through mutual fund apps.

- Many mutual fund investors have knowledge of mutual fund in which have invested only.
- Diversification of risk is the most lucrative benefit of investing in mutual funds as per this study.
- Most of the people invest in mutual funds because according to them it is better to invest in mutual funds rather than directly investing in shares/debentures.
- As per this study no knowledge about how to invest in mutual funds is the important reason behind not investing in mutual funds.
- There is significant relationship between age of investors and their level of awareness of mutual funds
- There is significant relationship between qualification of investors and their level of awareness of mutual funds.
- There is significant relationship between investors who are aware of mutual funds operations and who actually invest in mutual funds.
- There is no significant relationship gender of investors and their level of awareness of mutual funds.
- There is no significant relationship occupation of investors and their level of awareness of mutual funds.

## Conclusion

Mutual Funds now represent perhaps most appropriate investment opportunity for most investors. As financial markets become more sophisticated and complex, investors need a financial intermediary who provides the required knowledge and professional expertise on successful investing. As the investor always try to maximize the returns and minimize the risk. Mutual fund satisfies these requirements by providing attractive returns with affordable risks. The fund industry has already overtaken the banking industry, more funds being under mutual fund management than deposited with banks. With the emergence of tough competition in this sector mutual funds are launching a variety of schemes which caters to the requirement of the particular class of investors. Risk takers for getting capital appreciation should invest in growth, equity schemes. Investors who are in need of regular income should invest in income plans.

The stock market has been rising for over three years now. This in turn has not only protected the money invested in funds but has also to help grow these investments.

This has also instilled greater confidence among fund investors who are investing more into the market through the MF route than ever before.

The mutual fund industry as a whole gets less than 2 per cent of household savings against the 46 per cent that go into bank deposits. "If mutual funds succeed in chipping away at bank deposits, even a triple digit growth is possible over the next few years.

## Suggestions

- There is a need to create awareness among female investors about mutual funds as they still place their savings in fixed deposits and saving accounts.
- Mutual funds offer a lot of benefits which no other single option could offer. But most of the people are not even aware of what actually a mutual fund is. They only see it as another investment option. So, the mutual fund companies should try to change their mindsets by coming up with awareness campaigns and seminars for private firm employees and business persons.
- Internet is the most influential primary source of knowledge so it should be used by Asset Management Company for advertisement about their new schemes.
- In today's scenario where every company is increasing their market share by providing services through apps, Mutual fund companies should create awareness about mutual funds apps and how easily they can be used to channelize their savings like KTrack app by Karvy, IPRU TOUCH by ICICI Prudential Mutual Funds, Invest Tap by SBI MF, Fingo by Birla Sunlife MF and many more.
- Investors are usually aware of the scheme in which they have invested so there is a need to create awareness among investors about other schemes available in market.
- Young people should be targeted for selling mutual funds schemes as they are more interested in knowing about different avenues available for investment.
- People having monthly income Rs 20,000- 30,000 should be made aware of how their small investment can give them high returns as they think due to small savings, they are able to buy mutual fund units.
- Non-Mutual Fund investors should be taught how to invest in mutual funds because they are not able

to understand the process of investing and should be made aware of various benefits available under mutual funds.

### **Limitations of the Study**

The study is subject to following limitations:

- It is based on only 140 respondents so; sample size may not adequately represent the whole market.
- Time was one of the biggest constraints as study was completed in time frame of 2 months.
- Some of the persons were not so responsive.
- Probability of error in data collection because many of investors may not have given actual answers of the questionnaire.
- Some respondents were reluctant to disclose personal information which can affect the validity of all responses.
- Study is restricted to retail investors in Delhi NCR region only.



# Installation of Safety Features In Cars Can Change Consumer Perception Towards on-Road Safety: An Empirical Analysis

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## Abstract

*Safety features in cars are an important phenomenon that consumers are emphasizing nowadays. This research will examine the factors that influence consumer's perception or beliefs about safety features in cars. The result will indicate the changing mindset of consumers buying behavior towards car variants having safety features as well as the factors that influence these beliefs and perception crucial for designing effective marketing techniques. The economic growth in India has led to higher disposable incomes among consumers. Along with growing income levels, there has also been a rise in health and wellness awareness. Manufacturers of cars and even the government have been carrying out campaigns highlighting the importance of on-road safety. As a result, Indian consumers are gradually realizing the importance and benefits of safety features installed in cars. As a result consumers who are conscious are opting for car variants which come pre-installed with standard safety features. The data for this research is collected from both primary and secondary source. Questionnaire is tool for primary data collection and secondary data is collected from journals, books, newspapers, websites and research papers.*

**Keywords:** Motor Vehicle Act, New Car Assessment Programme, Global Positioning System, Inter Vehicle Signaling

## Introduction

The automobile industry in India is world's fourth largest, with the country currently being the world's 4th largest manufacturer of cars and 7th largest manufacturer of commercial vehicles in 2017. Indian automotive industry (including component manufacturing) is expected to reach Rs 16.16-18.18 trillion (US\$ 251.4-282.8 billion) by 2026. Two-wheelers dominate the industry and made up 81 per cent share in the domestic automobile sales in FY18. Overall, Domestic automobiles sales increased at 7.01 per cent CAGR between FY13-18 with 24.97 million vehicles being sold in FY18. Indian automobile industry has received Foreign Direct Investments (FDI) worth US\$ 19.29 billion between April 2000 and June 2018.

Domestic automobile production increased at 7.08 per cent CAGR between FY13-18 with 29.07 million vehicles manufactured in the country in FY18. During April-November 2018, automobile production increased 12.53 per cent year-on-year to reach 21.95 million units.

During April-November 2018, highest year-on-year growth in domestic sales among all the categories was recorded in commercial vehicles at 31.49 per cent followed by 25.16 per cent year-on-year growth in the sales of three-wheelers.

The passenger vehicle sales in India crossed the 3.2 million units in FY18, and is further expected increase to 10 million units by FY20.

## Automobile Regulation in India

The four-wheelers regulations in India are administered by the Ministry of Shipping, Road Transport & Highways (MoSRT&H) which is the nodal service for regulation of the car part in India. The key instrument administering the four-wheelers part in India is the Motor Vehicles Act, 1988 (MVA) alongside the Central Motor Vehicles Rules 1989 (CMVR). The Act administers emanation standards and security guidelines in India and combines the law relating to engine vehicles. The CMVR give the principles that clarify the MVA in point of interest.

AISC is a council situated up by MoSRT&H. The reason for making this board of trustees was to survey the wellbeing guidelines as to engine vehicles in India on an occasional premise and to give proposals.

In the wake of testing the vehicle for consistence of all guidelines and standards, the test organization might concede an authentication to the producer. The test

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organizations are – Automotive Research Association of India, Pune (ARAI), Vehicle Research & Development Establishment, Ahmednagar, Central Farm Machinery Testing and Training Institute, Budni, Indian Institute of Petroleum, Dehradun, Central Institute of Road Transport, Pune and International habitat for Four-wheelers motive Technology, Manesar.

### Issues Over Road Safety

As per authority measurements, 105725 individuals were murdered in street car accidents in India in 2006. The circumstance in India has exacerbated as of late. Activity fatalities expanded by around 5% every year from 1980 to 2000, and from that point forward have expanded by around 8% every year for the four years for which insights are accessible. This is attributable halfway to an increment in the quantity of vehicles out and about, and mostly to the nonappearance of a facilitated authority approach to control the issue. The casualty rate has expanded from 36 fatalities every million persons in 1980 to 95 fatalities every million persons in 2006.

Issues over street wellbeing in India, has been striking carmakers for a long time now. After identifying with wellbeing highlights introduced in four-wheelers in India, the Government has at last made it required for vehicle creators to introduce fundamental security highlights, for example, air bags, stopping e-brakes, seat belt updates, kid restriction frameworks and fortified body structures in all their individual four-wheelers fabricated and sold from October 2015. This would imply that even the passage level four-wheelers costs would ascend by about Rs. 30,000 to Rs. 35,000.

Indian streets are thought to be one among of the most hazardous. Around 1,40,000 individuals purportedly individuals supposedly lose their lives in road mishaps consistently. The current benchmarks oblige four-wheelers to withstand frontal accident at velocities of around 46 kilo meter per hour, while the new NCAP regulations would be in light of European measures that might oblige four-wheelers to pass frontal and side effect accident tests at 56 km/hour. The choice takes on during an era when two well-known hatchbacks to be specific – Datsun Go and Maruti Swift have fizzled accident test led by worldwide testing firm Global NCAP.

It appears the manufacturers (both within the country and worldwide) couldn't think less about security. Also, large portions of these models are sent out to other developing markets as well.

According to a report by TOI India has recorded the maximum number of road accidents worldwide and in spite of it car makers are hesitant to introduce the necessary safety features as it increases the cost of cars and will discourage the buyers, therein affecting the sales and revenue.

The government is considering a proposal for mandatory installation of safety equipment's, after global NCAP declared some of the country's top-sellers unsafe in crash tests. To counter this move of the government, car makers argue that it will increase the cost by 40000 to 50000 and will discourage customers.

The main motive for both the government and the automobile manufacturers should be to entitle everyone a safe and tension free journey.

### Review of Literature

**Koppel, Olona Solano (2005):** This study focused on the significance of vehicle security during the time spent acquiring a new vehicle. Reviews were led in Sweden and Spain with private buyers and armada directors. The discoveries demonstrate that standard safety was a high need in the new vehicle buy process. Various components were found to impact acquiring choices, including nation of living arrangement, age, driving separation, sexual orientation and training, encroachment history, explanation behind buying the new vehicle, and utilization of EuroNCAP evaluations. The discoveries highlighted the need to teach specific target gatherings of purchasers about safety standards in the new vehicle buy process. EuroNCAP results need to be advanced all the more broadly and viably so they assume a more noticeable part in their new vehicle decisions.

**Dr. Bela Shah (2006):** This paper tries to clarify the growing problem on Road Traffic Injuries. Street Traffic Injuries (STI) is a prospering general wellbeing issue the world over. Changing ways of life and occupation, country to urban movement looking for better work, expanding populace, urbanization and current frameworks has made man more subject to mechanized vehicles. In the mission for a superior economy the creating scene has turned to procuring speedier method for transporting individuals and products. The increasing number of vehicles coupled with aimless city infrastructure and not very scientific street plans has brought about making the overall population helpless against street crashes consistently.

**Robyn D Robertson, Kyla Marcoux(2007):** This report contains the after effects of the Traffic damage Research

Foundation examination concerning Canadian drivers impression of mentality towards and nature with ten cutting edge vehicle security highlights: antilock braking systems (ABS), footing control, brake help, electronic steadiness control, electronic brake power appropriation, versatile headlights, impact advising systems, way flight warning structures, brake override, and driver checking systems.

**AP Sing, PK Agarwal (2011):** This published literary work looks to research the circumstances and end results relationship between street mishaps and how to anticipate them by taking the correct safety-oriented measure. "Pace Thrills however Kills" yet at the same time individuals needs to go fast in everyday life. The dangerous session of chased and seeker is every day played on the Indian Roads, with the enormous vehicles assuming the part of seeker and the powerless segment and littler vehicles being chased. Street car crashes are the most inflammable point in today's situation on the Indian street system. Various individuals are losing their lives. These accidents result in extensive damage and hardship as well as have a significant effect on the nation's economy, costing an expected Rs 300 billion or more than 3% of India's GDP consistently. India has the second biggest street with more than 3 million km of asphalt of which 46% are cleared. These streets convey an expected 60% of cargo and 80% of travelers and they make an essential commitment to India's economy. The research also delves in other problems such as street mishaps, their patterns, components in charge of road accident, impacts of street mishaps, counteractive action and control and some late ways to deal with enhance the wellbeing on roads.

**Belinda Clark, Dr. Sjaan Koppel (2012):** This noteworthy exertion has been centered around enhancing the wellbeing society amongst purchasers; however, enlistment information investigation uncovers that around 50% of all new vehicles sold in Australia are for private utilization. These incorporate the Australian New Car Assessment Program (ANCAP), the Used Car Safety Ratings (UCSR) Program and the [howsafeisyourcar.com.au](http://howsafeisyourcar.com.au) site. Taking into account the accessible writing Koppel et al., (2005) presumed that while vehicle safety was getting to be more critical to shoppers it was still not considered a key figure the buy choices, with need normally focused on components, for example, value, dependability and appearance. It was noticed that inside some buyer assembles more tasteful sort elements, for example, vehicle appearance or solace, were even organized over wellbeing. An overview directed on actively present people at a North American four-wheelers fair found that members positioned wellbeing fifth in their acquiring choice with vehicle style and appearance positioned higher

in fourth position (Progressive Insurance, 2001). Pretty nearly one fifth of the members put more significance on having a CD player than ABS and about half viewed as side airbags to be less vital than vehicle shading. Regularly the consideration of vehicle security in the buying methodology happens further down the choice making chain, assuming a part in settling on more particular alternatives. By and large, the writing audit presumed that experimental comprehension into the part of security in shopper vehicle buying decision is constrained (Koppel et. al., 2005). The setting of needs inside the acquiring procedure can include complex associations between different variables. Shoppers usually reported needing to make exchange offs between value, unwavering quality and wellbeing yet the level of significance ascribed to every component inside this measuring methodology obliges further investigation. Crevices in the current information base were likewise distinguished, for example, the level of buyer comprehension in regards to particular security highlights and their capacity in connection to traveler and walker wellbeing, and also knowledge into purchaser readiness to pay for the incorporation of extra wellbeing highlights in their vehicles (Koppel et. al., 2005). In light of the discoveries of their writing survey Koppel et al., (2005; 2008) outlined and directed the SARAC study into the part of security in the vehicle obtaining procedure for customers over two nations, Sweden which has a generally low street toll inside the EU, and Spain which nearly has a moderately more ethical route toll. The point of the study was to focus: how vital vehicle wellbeing is in the new vehicle buy process, what significance customers put on security choices/highlights in respect to other comfort and solace highlights, and how buyers conceptualize vehicle security. The key elements connected with an individual organizing security in picking a vehicle were: utilization of Euro-NCAP, sexual orientation and instruction level, age, drivers worry about accident association, first vehicle 3 buy, yearly driving separation, individual for whom the vehicle was bought, and activity encroachment history (Koppel et. al., 2005).

**Gary Silberg, Richard Wallace (2013):** This paper from KPMG looks for the business progress and inspects the social, financial and natural powers that are rolling out improvement investable in the car business. It talks about the progressing joining of the key empowering advancements, for example, four-wheelers driving four-wheelers, the consequent selection of self-driving vehicles and the suggestion for venture. In the new universe of heading toward oneself (self-sufficient) four-wheelers, who will outline and assembling vehicles? Who will outline the purchaser experience? Who will possess the optimistic brands? Will the four-wheelers brands still matter? Provided that this is true, by what means will

they adjust to keep up upper hand? Who will lead in this developing biological community? These inquiries and others proliferate, as different members in the car biological community think about the effect of these conceivably problematic new advancements.

**LudovicSubran (2014):** This report distributed by the Economic Outlook discusses the development in worldwide car generation. As indicated by this report generation of cars in China, India and Mexico will be expanding opposite a languid market in the European landmass in view of the geo-political and monetary milieu. It likewise clarifies how significant part makers of the vehicles business will be profiting and enlisting larger amounts of return on investment.

## Research Methodology

In order to investigate the objectives of this study and answer the hypotheses, the descriptive research method was employed. The questionnaire survey technique was used to collect data and the questions were self-constructed. The survey was conducted in Delhi and NCR

The other questions were on variables used to assess automobile service performance; customer care services. The rating scale varied. Street interviews and convenient sampling presented better chance of having high representation of the sampling population, cheaper cost and rapid speed of data collection

## Selection of Sample

Sampling techniques provide a range of methods that enable you to reduce the amount of data you need to collect by considering only data from a sub-group rather than all possible cases or elements.

## Data Collection

### Primary Data

The first-hand information bearing on any research is the one which has been collected by the researcher. The data here is collected through a structured questionnaire.

There were 120 questionnaires distributed. 105 questionnaires were collected. And 4 of them were poorly answered so 101 were reliable to use. This indicated 87% response rate. The respondents were first asked whether they wish to answer the questions or not.

### Secondary Data

The data which has already been collected, complied and presented earlier by any agency may be used for purpose of investigation. The data collected through:

- Various publications in form of annual reports, various papers and journals published from time to time
- Through internet and Books

Following software's has been used during analysis and compilation of data: -

- Microsoft Excel
- SPSS

## Data Analysis

This provides demographics and descriptive statistics: reliability and validity assessment and the results of hypotheses are delivered.

Measure	Item	Frequency	Percent
Gender	Male	69	69%
	Female	31	31%
	Total	100	100%
Occupation	Student	65	65%
	Working Professional	29	29
	Home-Maker	5	5
	Total	0	0

## Correlation

Correlation refers to a technique used to measure the relationship between two or more variables. When two things are correlated, it means that they vary together. Positive correlation means that high scores on one are associated with high scores on the other, and that low scores on one are associated with low scores on the other. Negative correlation, on the other hand means that high scores on the first thing are associated with low scores on the second. Negative correlation also means that low scores on the first are associated with high scores on the second. An example is the correlation between body weight and the time spent on a weight loss program. If the program is effective, the higher the amount of time spent on the program, the lower the body weight.

Pearson r is a statistic that is commonly used to calculate bivariate correlations. To interpret correlations, four pieces of information are necessary.



- The numerical value of the correlation coefficient. The correlation coefficients can vary numerically between 0.0 and 1.0. The closer the correlation is to 1.0, the stronger the relation. A correlation of 0.0 indicates the absence of a relationship.
- The statistical significance of correlation. A statistically significant correlation is indicated by a probability value of less than 0.05. This means that the probability of obtaining such a correlation coefficient by chance is less than five times out of 100, so the result indicates a presence of relationship.

A correlation can only indicate the presence or absence of a relationship, not the nature of relationship. Correlation is not causation. There is always the possibility that a third variable influenced the results.

### Chi-Square Test for Association

The chi-square test for independence, also called Pearson's chi-square test of association, is used to discover if there is a relationship between two categorical variables.

Pearson's chi-squared test is used to assess two types of comparison: tests of goodness of fit and tests of independence.

- A test of goodness of fit establishes whether or not an observed frequency distribution differs from a theoretical distribution.
- A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other (e.g. polling responses from people of different nationalities to see if one's nationality is related to the response).

It tests a null hypothesis stating that the frequency distribution of certain events observed in a sample is consistent with a particular theoretical distribution. The events considered must be mutually exclusive and have total probability of 1. A common case for this is where the events each cover an outcome of a categorical variable.

#### Q 1

H0: There is no relation between feeling safe to drive alone and wearing a seat-belt every time one sits in a car.

H1: There is a relation between feeling safe to drive alone and wearing a seat-belt every time one sits in a car.

### Correlations

		Do you feel safe to drive alone?	Do you wear a seat belt every time you sit in a car?
Do you feel safe to drive alone?	Pearson Correlation	1	.010
	Sig. (2-tailed)		.919
	N	100	100
Do you wear a seat belt every time you sit in a car?	Pearson Correlation	.010	1
	Sig. (2-tailed)	.919	
	N	100	100

A spearman rho of +.10 was recorded between feeling safe to drive alone and wearing a seat belt every time you sit in a car. This is not statistically significant and therefore the null hypothesis must be retained. Given that there is no statistically significant relationship, feeling safe while driving alone is not dependent on wearing a seat belt every time a person sits in a car. The relationship is so low as to be random, and other variables not measured in this study must have a greater influence in determining the feeling of safety to drive.

#### Q 2

H0: Wearing seat-belt in a car is not out of awareness of safety regulations on road.

H1: Wearing seat-belt in a car is out of awareness of safety regulation on road.

### Correlations

		Do you wear a seat belt every time you sit in a car?	Are you aware of the safety ad security regulations which need to be followed while driving a car?
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Do you wear a seat belt every time you sit in a car?	Pearson Correlation	1	.984**
	Sig. (2-tailed)		.000
	N	100	100
Are you aware of the safety and security regulations which need to be followed while driving a car?	Pearson Correlation	.984*	1
	Sig. (2-tailed)	.000	
	N	100	100

The recorded p-value is .000 which is lesser than the significance value of 0.05 suggests that the alternative hypothesis must be accepted and the null hypothesis will be rejected. The result is statistically significant. Therefore, passengers sitting inside the car choose to wear their seat belts because they are aware of the safety regulations to be followed on the road and subsequently choose to obey the rules on the road.

### Q 3) Crosstab

H0: Feeling safe to drive alone is independent of the gender.

H1: Feeling safe to drive alone is dependent on the gender

#### Crosstab

		Gender		Total
		Male	Female	
Do you feel safe to drive alone?	Disagree	5	1	6
	Neutral	3	8	11
	Agree	23	14	37
	Strongly Agree	40	6	46
Total		71	29	100

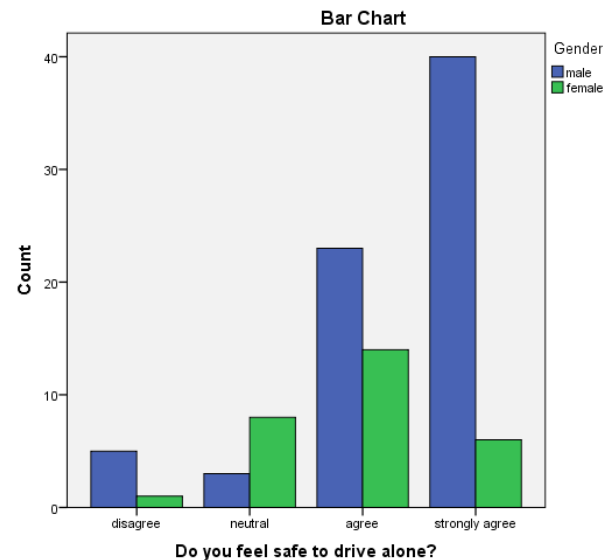
#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.750 <sup>a</sup>	3	.000
Likelihood Ratio	17.428	3	.001

Linear-by-Linear Association	7.230	1	.007
N of Valid Cases	100		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.74.

Do you feel safe to drive alone?



Since the p value is .00 which is less than .05 so the result is statistically significant. There is a significant relation between feeling safe to drive alone and gender. Male drivers are more comfortable driving alone in a relative comparison to female drivers.

H0: Feeling safe to drive alone at night is independent of the gender.

H1: Feeling safe to drive alone at night is dependent on the gender.

Do you feel safe to drive at night?

#### Crosstab

Count

		Gender		Total
		Male	Female	
Do you feel safe to drive at night?	Strongly Disagree	0	1	1
	Disagree	7	9	16

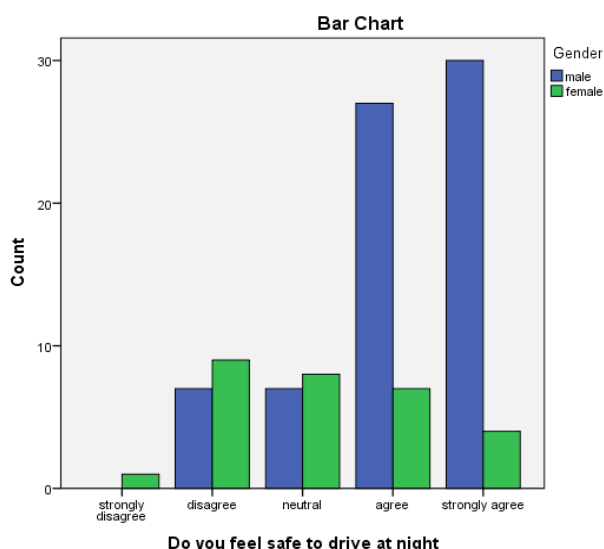


	Neutral	7	8	15
	Agree	27	7	34
	Strongly Agree	30	4	34
Total		71	29	100

### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.606 <sup>a</sup>	4	.001
Likelihood Ratio	18.568	4	.001
Linear-by-Linear Association	16.687	1	.000
N of Valid Cases	100		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .29.



Since the p value is .00 which is less than .05 so the result is statistically significant. There is a significant relation between feeling safe to drive alone at night and gender. Based on the results and the given bar diagram, the men are comfortable driving at night whereas women feel insecure to drive at night. A possible explanation to this is the poor and casual behavior of the law enforcement agencies, to provide better security to women at night. While there are no male respondents who have answered that they feel unsafe to drive at night, a small percentage of the female respondents have strongly agreed that they feel unsafe to drive at night. Thus, driving alone at night is dependent on the gender.

### Q 4

H0: Customers are not ready to pay more even after being aware of the safety regulations to be followed on the road.

H1: Customers are ready to pay more after being aware of the safety and security regulations to be followed on the road.

### Correlations

		Are you aware of the safety and security regulations which need to be followed while driving a car?	Are you ready to pay higher amounts to ensure that your car is well equipped with the standard safety measures?
Are you aware of the safety and security regulations which need to be followed while driving a car?	Pearson Correlation	1	.322**
	Sig. (2-tailed)		.001
	N	100	100
Are you ready to pay higher amounts to ensure that your car is well equipped with the standard safety measures?	Pearson Correlation	.322**	1
	Sig. (2-tailed)	.001	
	N	100	100

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

Based on the results the p-value is .001 which is smaller than the alpha value of .05. Therefore, the customers are ready to pay more for safety features in their car and are aware of the safety and security regulations to be followed on the road.

Initiatives should be taken by both the government and the car-makers to make the consumers aware of the positive benefits of a clear understanding of the safety and security standards so that consumers can have a better civic sense while driving and also knowing the necessary technical specifications required will be helpful in reducing the impact caused by road accidents. Aware consumers can make better buying decisions. This result also clears the doubt that upon installing safety features in cars consumers will not shell out extra cash instead consumers will pay more if they are better informed.

### Q 5

H0: Customers are not ready to pay higher amounts if safety is the first criteria in the process of buying a car

H1: Customers are ready to pay higher amounts if safety is the first criteria in the process of buying a car

### Correlations

		Is safety the first criteria for you in the process of buying a car?	Are you ready to pay higher amounts to ensure that your car is well equipped with the standard safety measures?
Is safety the first criteria for you in the process of buying a car?	Pearson Correlation	1	.479**
	Sig. (2-tailed)		.000
	N	100	100
Are you ready to pay higher amounts to ensure that your car is well equipped with the standard safety measures?	Pearson Correlation	.479**	1
	Sig. (2-tailed)	.000	
	N		

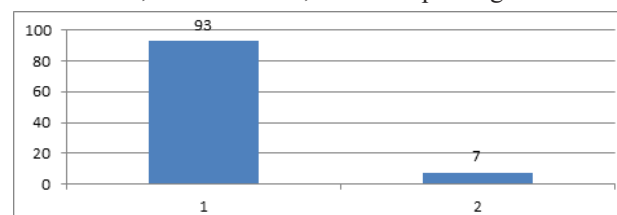
\*\* . Correlation is significant at the 0.01 level (2-tailed).

The p-value recorded is .000. Thus, the null hypothesis ( $p < 0.05$ ) cannot be accepted. Based on the recorded results, safety being the first criteria in the process of buying a car has a statistically significant linear relationship since  $p\text{-value} < .001$ . The direction of the relationship is positive and so as variable A increases, so does variable B and as variable decreases, so does variable B. If safety is the first criteria for a consumer while buying a car then consumers will be ready to pay higher amounts to ensure that their car is well equipped with the standard safety measures. Car-makers therefore should give more impetus on informing the customers of the added benefits of having standard safety equipment's in their cars. A justified explanation by the car-companies in support of the increase in the cost of the car will allow the customers to make more informed buying decisions.

### Data Analysis

Out of the hundred responses collected with the help of convenient sampling the analysis of the responses brought out the following results:

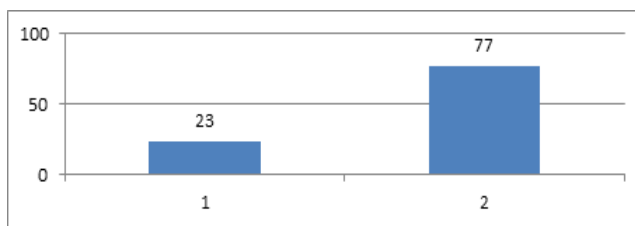
- From the sample size of hundred respondents 93% of the respondents use their own car whereas the remaining 7 % prefer to use other modes of transport. Modes of transportation may include the Delhi Metro Service, auto-rickshaw, bus or carpooling.



**Fig-1: Percentage of choice of mode of transport**

This bar diagram depicts the number of respondents who have chosen to use their own mode of transport or prefer using other modes of transport. While 93% of the respondents have a car of their own the remaining 7% do not have any car. Column 1 depicts the number of respondents possessing a car and the Column 2 depicts the number of respondents who do not have their own car. However, responses recorded were from the assumption that if the respondent chose to purchase a new vehicle what would be his behavior towards the safety standards of the car.

The results from the research has revealed that off the hundred respondents 77% of the car owners choose to drive alone while the remaining 23% use a driver to drive them around.

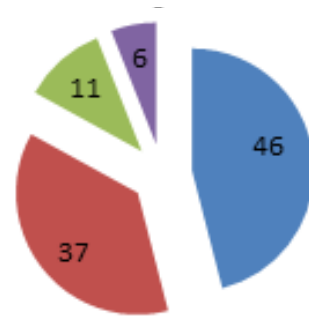


**Fig-2: Percentage of car owners to drive alone**

Distractions are a major cause of road accidents. The 23% of car-owners who use a driver to drive them around shared that using a driver helps them to be occupied with their own work. It gives them the freedom to receive phone calls or to munch on eatables or enjoy the surrounding without having to think of the road. Driver according to the 23% are more specialized. The duty of a driver is to keep the passengers safe. This in turn gives a sense of relief to the passengers sitting inside the car. The 23% of the car-owners who use a driver are females who are either working or are going to college or are working women who need drivers to drive them around to make them feel safer. Furthermore, having a driver saves the owner the miscellaneous troubles of owning a car such as parking, re-fueling of the car, getting home from a late-night party, driving while being intoxicated, making long tiring journeys or the trouble of having to manage through a traffic jam.

On the other hand, the 77% of the car-owners who do not use a driver have something entirely different to tell. According to them having a driver takes away the pleasure of driving a car. Possessing a car and driving it around gives a feeling of grandeur to the car owners. It is more of self-indulgence for them. Driving one's own car gives a feeling of control. It allows the owner to be in-charge of the entire experience in relation with the car. Not having a driver gives the owner more flexibility. Unlike with the ones that use a driver, owner-driven cars have the liberty to use the car at the owners will. The owner does not have to be at the mercy of the driver's convenience. The owner can instead use the car whenever he chooses to do so. Data also reveals that of the 77% a good number of the respondents are male working- professional or college going students who need more flexibility in moving around.

-From the responses collected data reveals that around 85% of the respondents feel safe to drive alone.

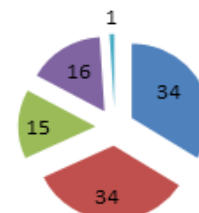


**Fig-3: Percentage of respondents feel safe to drive alone**

Car owners are not threatened by the fact that they are driving alone. While 11% of the respondents are indifferent towards the scenario only 6 % feel the need of company while driving a car. This 6% of the respondents are mostly females. Housewives or home-makers will feel more secured driving with a co-passenger during any time of the day rather than having to make the journey alone.

Car-makers are fulfilling their responsibility of keeping the customers safe by recalling cars which are defected and not in 100% condition to be running on the road. Numerous car companies have recalled their cars in such situations. For example, Maruti Suzuki had planned to recall over 33000 units of the Alto 800 and Alto K10 series to fix a potential issue related to the right-hand door. According to the company even if from a customer's point of view nothing is wrong with the door, the company is hesitant because the door has chance of opening if pressure is applied from the inside. But, for customer safety, the company had undertaken the replacement of the door latch assembly, proactively. Call this societal marketing or corporate social responsibility or corporate philanthropy, at the end of the day all the company wants is for the customers to be safe. This development of trust and reliability on the company by the customers is what drives the sales of Maruti Suzuki cars.

The data collected after analysis revealed that while 68% of the passengers feel safe to drive at night the remaining 32% differ in this matter.

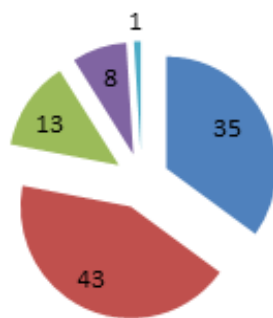


**Fig-4: Percentage of passenger feel safe to drive at night**

Respondents who have strongly agreed that they feel safe to drive at night have shared that they do not see it as a risk. According to this 34% of the owners the roads in Delhi NCR region is well-lit and broad. Drivers on this road can drive seamlessly without coming across any sorts of accident. Adding to it further, they have also claimed that driving at night is sometimes even better than driving in the morning because the traffic by night becomes thin therefore giving the drivers a far richer driving experience. The 68% of the respondents comprise of both males and females who are either students or working professional and need to travel at night.

The remaining 32% on the other hand have something quite contrary to say about driving at night. They responded in a negative fashion to this question because of the facts which they hold true to themselves. Driving at night is risky as most of the drivers have their vision limited at night. Passing cars or cars pulling up from the behind, with their beaming headlights, further impairs the driver's vision. Night is also the time when the body gets tired. This is because of the circadian cycle or body clock. This lowers the driver's concentration and his reaction time. Old working professionals tend to have more trouble in seeing at night. Rash driving and road rage performed by anti-socials or drunkards or even by other drivers who want to get somewhere fast adds to the list of accidents and deters people from driving at night.

-On asking the respondents whether safety was the first criteria for them in the process of buying a car, 43% have agreed that it is and 35% have strongly agreed that indeed safety was one of the factors they look into when making a buying decision for a car.



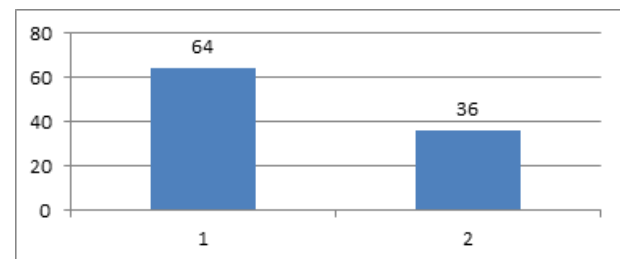
**Fig-5: Percentage of respondents on safety as first criteria**

78% of the respondents have agreed to the fact that when they go to buy a car, they not only go for the performance of the car but also the safety which the car provides. One

of the reasons why customers choose to buy cars over bikes is the safety which a car provides to the passengers inside the car in case of an accident. The body of the car is comparatively sturdy enough to secure the passenger inside from direct impact of the collision, in case there is any. While bigger cars have a stronger body hatchback on the other hand have a relatively weaker body. Governments and other safety watchdogs are scrutinizing all new cars which are being launched on the safety and security which the car provides. For example, on failing the Global NCAP's crash test Nissan motors had to withdraw its car Datsun GO from the market so that its body shell could be made harder using high-grade steel and other reinforcements.

However, there are also consumers who would rather go for the mileage and performance than only on the safety. According to the remaining 22% of the consumers who do not have safety as the first criteria while buying a car, feel that the cars already have a strong body shell to protect the passengers inside and it is the mileage which they are more concerned about. The shape, style, performance, mileage and the inside space are features which drives their buying process and not the sturdiness of the body shell.

-According to the survey, 64% of the owners have already got pre-installed air bags in their cars. The remaining 36% on the other hand do not have air-bags in their cars.



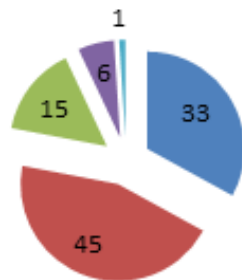
**Fig-6: Percentage of respondents with pre-installed air bags**

The government of India on noticing the rise of road-accidents and the carelessness of the automobile companies who have ignored to comply with the safety features to be installed in their cars to conveniently lower down their prices has made it mandatory for all car companies to install air-bags, anti-braking system, child restraint, belt reminder and reinforced body structures in their cars. This rule will take effect from October 2015. While old car models have no air-bags in them, all new models will have the above-mentioned safety standards as a part of their feature. To ensure the safety of the passengers inside the car Honda Motor Co had to recall an estimate of 400,000 vehicles globally as a precautionary measure so that they could replace potentially dangerous air bag inflators made

by another company named Takata Corporations. This step was taken even before any injuries could be reported about the fault.

Similarly, Ford Eco Sport will recall nearly 21,000 units over problems related with the air-bags and other faulty parts. This step by Ford was taken because the company feels that the safety of their customers is a top priority and being proactive to voluntary recall will ensure better customer safety and satisfaction.

Consumers in being given a choice whether they would prefer LED headlights to conventional halogen lights chose to go with LED headlights.

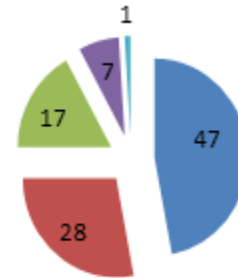


**Fig-7: Percentage of respondents preferring LED headlights**

78% of the consumers have agreed that they would rather use LED lights in their cars than Halogen lights. Halogen headlights are a more convenient option for automobile companies as it is simple and cost-effective. Halogen lights are easily replaceable but is energy wasting and needs extra care. On the other hand, the most important factor when it comes to LED headlights is that they can work on very low power compared to the conventional halogen bulbs. LED headlights are small in size and brighter than the classic headlamps. The only disadvantage for which car companies do not want to include it as an automotive part is because of the high production costs and the rise in the temperature created when they are lit making it difficult to cope with the already high engine bay temperature. The future of headlights is evolutionary. Companies like BMW are now installing Laser lights. Laser lights are more energy efficient and 1000 times brighter than LED headlights and double the range. The flipside is that Laser lights are extremely expensive, need cooling and create more heat than LED systems.

The death of Gopinath Munde had a positive fall-out. It had created a deep concern over the lack of safety while driving and the need to wear seat-belts. Every car which was manufactured after March 25, 1994 was equipped

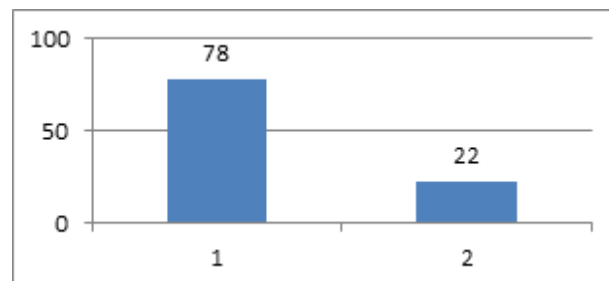
with front seat-belts and the installation of rear seat-belts started from 2002. In India most states made it compulsory to wear seat-belts starting from 2002.



**Fig-8: Percentage of respondents having awareness of the safety seat belts**

Data collected has revealed that 75% of the consumers are aware of the safety which is provided by seat-belts. This awareness should also be increased amongst the remaining 25% of the consumers using campaigns by automobile companies or government initiatives. It is the duty of the state governments to implement laws and strictly penalise the defaulters. On wearing a seat-belt the impact of an accident is reduced manifold. The lax attitude of traffic constables is one of the reasons why defaulters are running around carelessly. The state of Tamil Nadu is an example where the government has no stringent laws for not wearing seat-belts. The rule of compulsory installation of child-restraint is a good step by the government of India. It is an upsetting situation when one has to read on the paper that an infant was killed because of a car-accident. Use of child-restraints protects the infant from fatal crashes or also when the driver has to apply the brakes suddenly.

eat-belt reminders have become a mandatory installation for car companies starting October 2015. In spite of the fact that the beeping alarm can be a nuisance to the passengers sitting inside the car it serves as a yard-stick warning the passenger to wear the seat-belt.

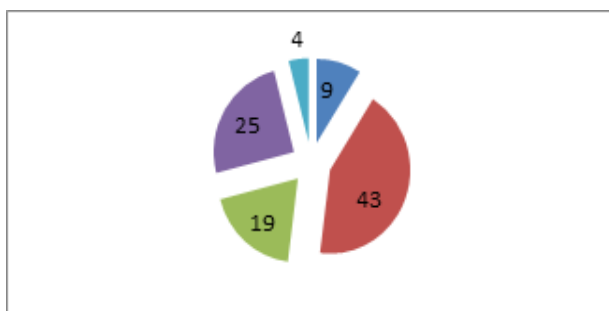


**Fig-9: Percentage of respondents paying heed to the beeping alarm for seat belts**



From the respondents, 78% of the passengers inside the car pay heed to the beeping alarm while the remaining 22% either choose to ignore it or do not have a reminder system installed in their car. An SBR sensor mat detects passengers who have occupied the seat. It triggers a warning light or an audible beep reminding the occupants to fasten their seat belts. In case of an accident seat belts reduce the risk of injury by 45% in cars and 60% in light trucks. Wearing a seat-belt is one of the most effective ways of preventing death or injury in a car crash. Seat belt reminders are an intelligent way of making the passenger aware. It was introduced in the New Car Assessment Programme (NCAP) in 2002 and the results fascinated most of the scientists and audience present. Henceforth, SBR has become a mandatory installation in all the cars.

A car needs to be serviced either every 3-6 months or after it has travelled for 10,000 Km. Timely servicing of a car improves the cars overall performance and the longevity of its parts. The manual of a car states the timely intervals during which a car needs to be serviced. Another factor of servicing depends on the degree to which the car is used. Some key items which need to be looked at while servicing is the timing chain, timing, belt, valve clearance adjustment and U-joints. Aluminum engines have very specific requirements for the coolant and anti-freeze radiator. The condition of the oil is a good indicator for timely servicing of the car. Wheel alignment is another important indicator for service requirement. Bad wheel alignment can eat up a whopping Rs 36,000 set of 30,000-mile tires in 2000 miles or less. Getting a car serviced every 6 months helps to maintain a good condition of the car and also in avoiding sudden breakdown problems.

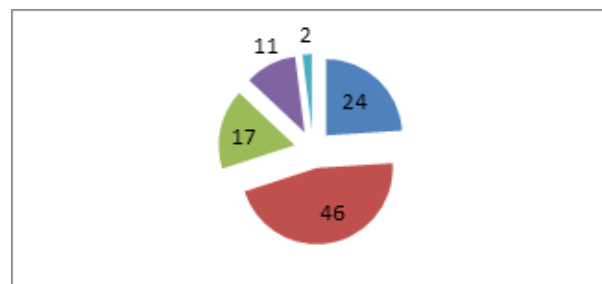


**Fig-10: Percentage of respondents getting cars service on monthly basis.**

52% of the respondents have agreed that they get their car serviced on a monthly basis, which is 3 to 6 months or every 10000 km depending on whichever comes first. The neutral 19% do not get their car serviced on a monthly basis and 29% have disagreed that they do not get their car serviced until it breaks down or the owners feel that the

performance of the car is going down.

Tire pressure is the amount of air in a car's tire measured in pounds per square inch. The required service involves checking the tires' pressure with a pressure gauge, at least monthly, if not more frequently. Proper tire pressure improves the cars' safety crucially. Incorrect tire pressure can compromise cornering, braking and the stability of the car. It can further affect the comfort, fuel economy and tire life. Too high pressure makes the car bouncy whereas too low tire pressure increases friction therein overheating the tire and wearing it prematurely. The recommended tire pressure is always lower than the maximum tire pressure. The recommended measurement can be found in the owner's manual or on the driver's door pillar or the glove compartment or the gas filler door.

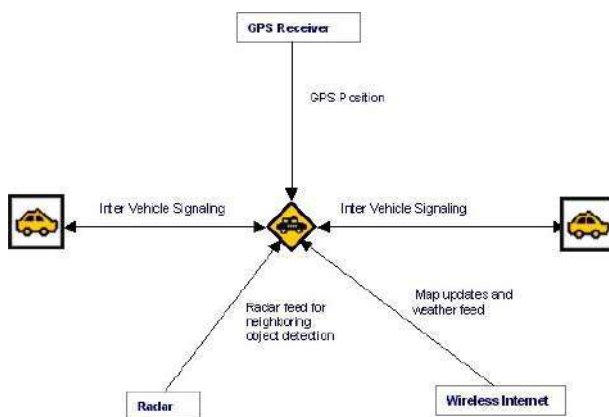


**Fig-11: Percentage of respondents ensuring tire pressure to improve car performance.**

70% of the respondents have agreed that they make sure to check their tire pressure to improve their car's performance in a petrol pump, every time they get a chance. These consumers are aware of the benefits of checking the tire pressure to improve the car's performance. 17% of the respondents who have selected neutral feel that there is no need to check the tire pressure every time they enter a petrol pump and would instead choose to check it every month or whenever they get a chance. The remaining 13% who have disagreed in checking the tire pressure, are either unaware of the implicit benefits of checking the tire pressure at frequent intervals or do not have enough time in their hands to do it.

According to a report published in the Wall Street Journal on March 27, 2015 Tesla Motors incorporation has provided auto makers and watchdogs a better understanding of the electric vehicle market. They have sent software updates to Tesla owners which will enable hands-free driving on the interstate, and the ability to operate the car without an occupant on private property. Another report on eventheli.com on auto-drive claims that by 2030 all major interstates in the US are expected to support Auto-drive Lanes where updated owners can enjoy speed limits up to 130 mph.



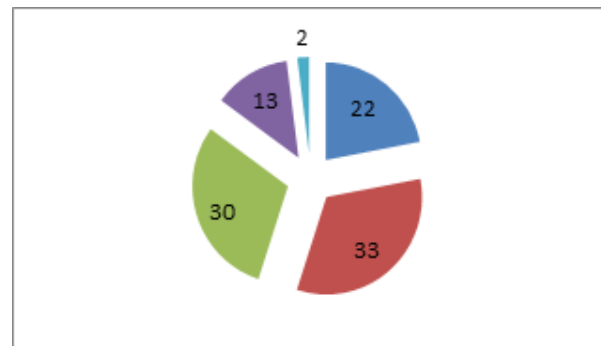


**Fig-12: This is the design of Auto Drive Technology**

The auto drive technology will use

- A **GPS (Global Positioning System) based position determination** for accurate steering of the car
- A **Inter Vehicle Signalling** for keeping track of neighboring vehicles and their speed.
- A **Radar Feed** to identify objects in vicinity of the car.
- **Map updates** with detailed information.
- **Weather feed** to adjust driving parameters according to current conditions
- **Construction and road closure detection** will be implemented using IVS.

Google has also unveiled the first fully working road-legal prototype of its self-driving car. The battery-powered vehicle of Google has a stop-go button, but no steering wheel or pedals. Following the likes of Google and Tesla, even Apple wants to venture into making electric cars. Indian companies are not far behind in this venture either. Mahindra Group is also planning with driverless cars. Mahindra's facility in Bengaluru has already begun tests and has even submitted proof of concepts for driverless cars in the UK and Singapore. A report from KPMG seeks the market dynamics and examines the social, economic and environmental forces for the adoption of self-driving vehicles and the implication for investment.

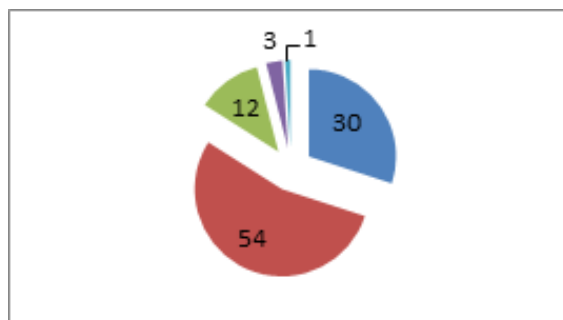


**Fig-12.1:**

From the respondents almost 55% of the respondents have agreed that they will feel more secured driving a car with auto-driving feature than a manual vehicle because according to them technology cannot go wrong and hence decreasing the chances of meeting with an accident.

However, 30% are neutral owing to the fact that auto-driving is something unheard off and the possibility of the electric car becoming commercialized is beyond imagination. And the 15% of the respondents who have disagreed outright feel that auto-driving feature will snatch away the owner's experience of driving. They have also added that technology no matter how updated, cannot make life-saving decisions like humans. The autonomy of human beings to make certain critical decisions make human beings what they are.

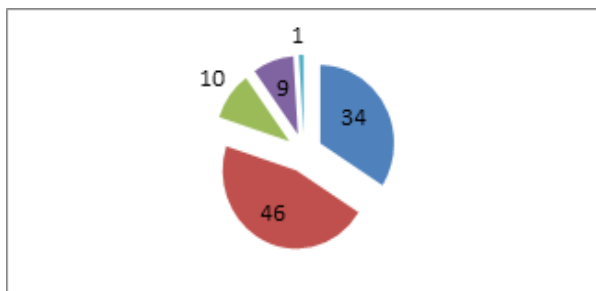
84% of the respondents have agreed that they are aware of the safety and security regulations which need to be followed while driving a car such as avoiding talking on the phone, familiarizing oneself with the vehicle's equipment's, presetting radio stations and climate control, avoiding smoking, drinking and reading while driving, reviewing maps before hitting the road and wearing seat-belts.



**Fig-13: Percentage of respondents not aware of safety and security regulations**

On the other hand, only a mere 16% of the respondents have disagreed that they are not aware of all the safety and security regulations to be followed while driving a car. These respondents have also claimed that they have either jumped traffic signals or not worn seat belts while driving or haven't fixed their head lights or rear-lamps or even over-speeded at times or driving on the wrong side of the road. While some delinquency was deliberate the rest was done sub-consciously, without the owner's knowledge. What these law-breakers have failed to realise is the risk they are putting on the passing pedestrians or other vehicles!

Installation of upgraded safety features in cars means an increase in the cost of production for the car manufacturers. This increase of cost will be transferred to the actual price of the car which has to be paid by the customers. For instance, a driver-side air bag can cost Rs 12,000 to Rs 42,000, depending on the year, make and model of vehicle. Passenger side air bags typically cost Rs 24,000 to Rs 60,000. Similarly, a child restraint can cost up to Rs 3300 to Rs 6300.



**Fig-14: Percentage of respondents paid high amount to ensure a safer car**

80% of the respondents have agreed to pay higher amounts to ensure a safer car while 20% of the respondents claimed that safety takes a back-seat and that the cars looks and performance is what they are ready to pay for. For instance, Volvo cars which charges a premium for its cars to ensure that their drivers are safe and to reduce injuries by improving driver visibility using cue transparent window pillars, infra-red night vision and seats, controls and pedals that move to ensure the driver is at the best possible position. Volvo's preventative safety systems include emergency brake assist, dynamic stability and traction control, electronic brake distribution and three-point safety belt (patented). According to Volvo, their innovative solutions like the Whiplash Protection System a system subsequently proven to reduce whiplash injuries by 50%.

## Conclusion

India is seeing an increment in its population consistently. The political, social, financial, legitimate and mechanical environment of India is progressing. The country has turned into one of the quickest developing economies on the planet. On turning into an individual from the BRICS gathering of creating economies, which comprises of huge players, for example, Brazil, Russia, China and South Africa, the exchange of India has enhanced complex. Items are currently being traded at a much bigger level. Besides, with the current government's changed arrangements, for example, direct outside speculation and "make in India" idea, enormous remote organizations are currently setting-up assembling plants India.

This rise in population is being coupled with enhanced ways of life. The developing race is in need of better ways of life. The working class or the climbers are seeing an ascent in their extra cash. With an increment in the family pay individuals need quicker, better, enhanced and overhauled levels of innovation which can make their life less demanding. Most climber salary families now claim four-wheelers. From the prior attitude of seeing cars as a materialistic trifle, four-wheelers have now turned into a need. They make most piece of an excursion agreeable, helpful and safe.

Security is a pivotal perspective in four-wheelers. Giving people security gauges in accordance with the worldwide guidelines set for four-wheelers can make the experience of driving a much pleasant experience. Producers are not complying with the worldwide benchmarks of safety. This is on the grounds that the establishment and incorporation of these highlights in the four-wheelers expands the expense cost of the four-wheelers which four-wheelers creators feel can't be exchanged to the offering cost as the clients search for quality for cash and won't be prepared to pay for the included profits. There is a positive connection. Taking a peek at the measurements of Indian street mishaps and the Indian four-wheelers-portable industry's unfeeling conduct to ignore wellbeing issues, the legislature of India has made it necessary, beginning October 17, for the required establishment of security highlights in four-wheelers. This implies that cars for domestic or commercial use made now must be outfitted with against slowing mechanism (ABS) and air-bags in the business.

The trend of an Indian shopper is to get a decent which is worth for cash. Be that as it may, this idea changes totally when it is a matter of the given client's wellbeing and security. Clients are prepared to pay and contribute

more on the off chance that it is going to enhance his wellbeing and security. In the event that a car, which comes outfitted with worldwide gauges of safety standards guarantees better wellbeing to the client however with an expanded expense, the client will be prepared to pay more for the certification of his or her wellbeing and security. In this way, the reluctant way to furnish four-wheelers with standard safety equipment's highlights ought to take a rearward sitting arrangement and guaranteeing the customers security ought to be the top need for the car manufacturers.

## Recommendations

Outside makers can consider putting resources into either or both, car area and four-wheelers parts part in India. Numerous top brands have officially benefited from the opportunities, and numerous more want to contribute. Today, India is a standout amongst the most lucrative promoting stages for the best vehicles that the world brings to the table.

## Arranged Activities Concern

1. Providing Indian four-wheelers creators financing for investigation, particularly to help the division conform to the developments and wellbeing benchmarks of tomorrow, and reinforcing credit dealing with a record crediting to industry
2. Managing the part's expenses by applying the standards of savvy regulation and security principles.
3. Supporting the internationalization of Indian car industry by enhancing business sector access through exchange transactions and chip away at administrative and procedural meeting with a definitive point of attaining to an overall four-wheelers sort support. This would imply that any four-wheelers delivered on the planet can be showcased in every nation of the world.
4. Low-tech assembling is effectively bested regarding quality added to a geographic district by medium- and cutting edge producing due to the larger amount of aptitudes obliged and compensation paid, and in addition the general level of business and open speculation made into the area, which is normally much more prominent. Besides, the multiplier effect of medium- and creative collecting can be more noticeable as effective supplier sorts out frequently co-put in the region to further engage without a minute to extra (JIT) gathering approaches, as in the four-wheelers business.
5. The current activity conditions, driving propensities, movement thickness and street client conduct require that greatest security be incorporated with the vehicles.
6. Based on the investigation, activities ought to be taken by both the administration and the four-wheelers creators to enhance the familiarity with the Indian four-wheeler's purchasers in regards to wellbeing and standard issues of an four-wheelers.

## References

### Sites Visited

- <http://icmr.nic.in/final/Final%20Report%20of%20the%20workshop%20on%20Development%20of%20a%20feasibility%20module%20for%20Road%20Traffic%20Injury%20Surveillance.pdf>
- [http://indiatransportportal.com/wp-content/uploads/2012/11/Road\\_safety\\_2012.pdf](http://indiatransportportal.com/wp-content/uploads/2012/11/Road_safety_2012.pdf)
- <http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/self-driving-cars-next-revolution.pdf>
- [http://www.manoramaonline.com/advnt/Specials/Road\\_Safety/recommendations\\_mm.htm](http://www.manoramaonline.com/advnt/Specials/Road_Safety/recommendations_mm.htm)
- <http://www.technicaljournalsonline.com/ijeat/VOL%20II/IJAET%20VOL%20II%20ISSUE%20II%20APRIL%20JUNE%202011/ARTICLE%2049%20IJAET%20VOLII%20ISSUE%20II%20APRIL-%20JUNE%202011.pdf>
- [http://tripp.iitd.ernet.in/DM\\_UMTRI-2009-1\[1\].o.pdf](http://tripp.iitd.ernet.in/DM_UMTRI-2009-1[1].o.pdf)
- <http://www.money-zine.com/financial-planning/leasing-or-buying-a-car/car-safety-features/>
- <http://www.rd.com/advice/9-car-safety-features-to-look-out-for/>
- <http://economictimes.indiatimes.com/policy/soon-crash-test-must-for-indian-cars/articleshow/38404105.cms>
- <http://www.cartrade.com/car-bike-news/new-cars-sold-in-india-shall-feature-mandatory-safety-features-effective-from-october-2015-125968.html>
- <http://www.motorbeam.com/2014/02/20/pil-seeks-mandatory-installation-of-airbags-on-vehicles-in-india/>

- <https://openminds.swissre.com/stories/577/?page=4>
- <http://www.theguardian.com/sustainable-business/2014/nov/06/nissan-called-on-withdraw-dangerous-car-model-indian-market-datsun-go-nissan>
- <http://www.howsafeisyourcar.com.au/Safety-Features/Crash-Protection-Features/>
- <http://www.ibef.org/industry/india-automobiles.aspx>
- <http://www.eulerhermes.com/mediacenter/Lists/mediacenter-documents/Economic-Outlook-The-global-Automotive-market-Sept14.pdf>
- <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/global-automotive-executive-survey/pages/default.aspx>
- <http://www.statista.com/topics/1487/automotive-industry/>
- <http://www.volvocars.com/in/top/about/values/pages/safety.aspx>
- <http://roadsafety.transport.nsw.gov.au/cgi-bin/index.cgi?action=authrestraintfitting.form>
- <http://cars.costhelper.com/airbag-cost.html>
- <http://autoclubsouth.aaa.com/Safety/focus.aspx>
- <http://drexel.edu/publicsafety/crimeprevention/safetytips/>
- <http://www.finance.gov.au/vehicle-leasing-and-fleet-management/vehicle-and-driver-safety.html>
- <http://www.extremetech.com/tag/self-driving-cars>
- [http://www.eventhelix.com/thoughtprojects/AutoDrive/auto\\_drive\\_concept.htm#.VRgU0vmUcbs](http://www.eventhelix.com/thoughtprojects/AutoDrive/auto_drive_concept.htm#.VRgU0vmUcbs)
- <http://www.bankrate.com/finance/auto/car-safety-features-drive-winter-1.aspx>
- <http://www.popularmechanics.com/cars/how-to/a3121/6-common-tire-myths-debunked-10031440/>
- <http://www.cartalk.com/content/service-your-car-13>
- <http://www.iee.lu/products:transportation:seat-belt-reminder>
- <http://www.eco-web.com/edi/061116.html>
- <http://www.autoevolution.com/news/battle-of-the-headlights-halogen-vs-xenon-vs-led-26530.html>
- <http://trak.in/tags/business/2014/11/08/airbags-abs-compulsory-cars-india/>
- [http://www.indialawjournal.com/volume2/issue\\_4/article\\_by\\_vidya.html](http://www.indialawjournal.com/volume2/issue_4/article_by_vidya.html)
- <http://reports.weforum.org/manufacturing-growth/automotive-industry-overview/>
- <http://siamindia.com>
- <http://automobileindia.com>

### Articles in News Sites Visited

- <http://economictimes.indiatimes.com/magazines/panache/apple-wants-to-start-making-electric-vehicles-as-early-as-2020-reports/articleshow/46307163.cms>
- <http://economictimes.indiatimes.com/industry/auto/news/passenger-vehicle/cars/mahindra-experimenting-with-driverless-cars-developing-software-to-control-cars-movement-in-india/articleshow/46461771.cms>
- <http://timesofindia.indiatimes.com/business/international-business/Honda-to-recall-about-400000-cars-over-Takata-air-bags/articleshow/45470953.cms>
- <http://timesofindia.indiatimes.com/business/india-business/Indian-carmakers-worry-more-about-sales-than-safety/articleshow/45244930.cms>
- <http://timesofindia.indiatimes.com/business/india-business/Ford-to-recall-nearly-21000-Eco-Sport-SUVs-over-faulty-parts/articleshow/45537958.cms>
- <http://timesofindia.indiatimes.com/business/india-business/Maruti-Suzuki-recalls-over-33k-Alto-cars-to-fix-problem-with-door/articleshow/46517122.cms>
- [http://www.telegraphindia.com/1100717/jsp/orissa/story\\_12694079.jsp](http://www.telegraphindia.com/1100717/jsp/orissa/story_12694079.jsp)
- <http://timesofindia.indiatimes.com/india/Gopinath-Munde-Gopinath-Mundes-death-rear-seat-belts-Harsh-Vardhan/articleshow/36069870.cms>
- <http://economictimes.indiatimes.com/industry/auto/news/passenger-vehicle/cars/nissan-motor-working-on-datsun-gos-body-shell-after-global-ncap-questions-safety-features/articleshow/46656646.cms>

# Practices and Performance of Receivables Management in Private Sugar Factories in Karnataka

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## Abstract

*Credit sales in the mail tool to maximize sales in today's competitive world. One cannot imagine any business without extending credit facility. The objective of receivables management is maximizing sales and minimize bad debt loss. The objective of the paper is to study the performance and practices of receivables management in select sugar factories in Karnataka, India. The study is desk research and empirical study. The population of the study comprises 36 sugar factories as on 31st December 2012. A sample of five private sugar factories is taken for the study. Primary and secondary data has been used in the study. The secondary data collected through annual reports for seven years from 2006 to 2012. Apart from the secondary data, the researcher collected primary data from the sample sugar factories by distribution of structured questionnaire to the head of finance department regarding cash management practices. The major findings are: all the same private factories extend credit to sell by-products; did not set up separate department to look after receivables management, the functions of credit were handled with the help of finance department, and receivables occupy third place in components of current assets.*

**Keywords:** Credit, Receivables, Management, Performance, Practices, Sugar Factories.

## Introduction

Debtors is one of the components of current assets of a business enterprise. Debtors are the results of credit granted by an undertaking to its customers. Sale of goods on credit helps a firm to maximize sales in modern business environment and trade credit is known as marketing tool. In the competitive world, it is not always possible to sell goods on cash only, since competition forces selling goods on credit. Increase in sales revenue is one of the factors of profitability of a business enterprise. After a certain level of sales, the increase in sales will not proportionately increase production costs and thus, increase in sales will bring in more profits. In the words of Joseph, "The purpose of any commercial enterprise is the earning of profit. Credit in itself is utilized to increase sales, but sales must return a profit".<sup>12</sup> Debtors management involves certain costs-opportunity cost and bad debts. Therefore, credit management is to optimize the sales at the minimum possible cost of credit. Trade credit not only optimizes sales, but also leads to maximization of return on investment. Management of trade credit, therefore, should be based on sound credit policies and practices. Put in simple, debtors' control and management are very necessary.

## Review of Literature

The researcher reviewed various publications available

like books, reports and journals. There were a good number of research studies available in the area of working capital management. But the researcher has given important ones on the select basis. The following are a few research papers and reports reviewed:

*Kumar A. V., (1998)* in his study he found that cooperative sugar factories' cash and cash equivalents occupies higher portion in the total current assets than that of the private sugar factories which affected the liquidity position. He also observed fluctuations in the cash levels of the cooperative sugar factories were much higher than that of the private sector factories. He suggested the need for immediate streamlining of cash management if the firms wanted a balanced liquidity.

In April 1980 Government of Maharashtra appointed a committee under the chairmanship of *Rane V.* with the aim of making recommendations for the formation of sugar industry's zones with the limitations in formation of sugar factories zone. As per sugar control under 1966, Rane committee observed that there was overlapping of villages allotted among the nearest sugar factories, which acted as obstacle for the implementation of sugarcane development programme by the respective factories. The

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committee felt that there is need for a minimum crushing of 2000 Tonnes Crushing a Day for viability of sugar factory. The committee suggested three zones of sugar industry in Maharashtra namely South zone, Central zone and North-east zone which is based on the recovery percentage of sugar.

Gowda K, (1984) studied on *Geo-metric Problems and Prospective of Sugar Industry in Karnataka*. Maximization of small farmers' income and contribute national income, he felt that resources-based production planning at the state level for the development of sugarcane cultivation and sugar industry is a major need of the country.

Vijayarajan A., (1984) carried a research entitled *the Impact of Agro-based Industries on the Agricultural Economy of Madurai District with special reference to Sugar Industry*. The main findings of the study are - the sugarcane price and location of the factory influences the farmers to go for cane growing; and 50 per cent of the sugarcane is devoted to Jaggery production it must be diverted to sugar production. He concluded that there is a need for an integrated plan with an emphasis on backward linkages of the agro-based industry must form an integral part of the agricultural plans.

Patel K.S., and Ashturkar B.W., (1992) have investigated the causes for sickness of sugar industry in Marathwada. They conclude that the industry is mainly suffering from inadequacy of sugarcane; low productivity; high cost and under-utilisation of plant capacity. They recommended that; the government should follow a realistic levy sugar price policy which is the root cause of all the problems.

Vijayakumar A and Venkatachalam A., (1995) carried out study on the interrelationship between working capital management and profitability. The study carried out by taking 31 sugar factories in Tamil Nadu. They concluded that liquidity was negatively associated with profitability, whereas the inventory turnover and debtors' turnover had a positive influence on profitability.

Sopan N.R., (1996) carried out a study entitled *Managing Cost and Productivity of Co-operative Sugar Industry in Solapur District*. He found that sample sugar factories are using financial accounting system for recording income and expenditure; no specific scientific method is followed to ascertain the cost of sugar production; low labour productivity; no differentiation between operating cost and cost of other activities and lack of cost consciousness among the technical and managerial personnel; do not provide adequate information in financial statements to measure and understands the overall productivity. He

suggested a suitable cost accounting management system for efficient management of productivity in sugar co-operative.

From the above, it is understood that no specific research study on the Performance and Practices of Receivables Management in the Private Sugar Industry in the State of Karnataka. Hence, the present study is undertaken.

### Statement of the Problem

The objective of receivables management is conflicting in nature, since extension of credit helps increase sales but at the same time involves bad debt loss. The main purpose of receivables management is to minimize the risk of bad debt. On the other hand, the other aim is to have optimum investment on debtors and control and management of trade credit. The firm should always avoid a situation of over investment or under-investment in debtors. The study focuses on the practices of select sugar factories in Karnataka. Which product is sold on credit? Do the sample factories have receivables/debtor's department? If yes, what are its functions? If no, then who manages receivables? What are the credit policies used? And which factors affect credit policy? The performance of receivables has been studied in terms of the size of investment in debtors, debtors as percentage to current assets, the correlation between debtors and sales, age-wise distribution of debtors, size of bad debt loss, debtor's turnover ratio. The study seeks to find answers to these questions.

### Objective of the Paper

The main objective of the paper is to know the practices and performance of receivables management in select sugar factories in Karnataka.

### Methodology

The Study is desk research and empirical study. The population of the study comprises all the private sugar factories continuously manufacturing sugar in Karnataka. As on 31st December 2012, the population of the study comprises 36 sugar factories, of these factories, 13 units, which had commenced crushing post study period (2002-03); six co-operative factories, which were given on lease to private sugar factories during study period (2002-03 to 2008-09); twelve factories, which did not respond to the researcher has been excluded from the study. This left five factories. The sample sugar factories are: Athani Farmers Sugar Factory Ltd. (Athani); Bannari Amman Sugars Ltd. (Bannari); Shri Prabhulingeshwar Sugars



and Chemicals Ltd. (Prabhulingeswar); Shree Renuka Sugars Ltd. (Shree Renuka); and The Ugar Sugar Works Ltd. (Ugar) and. Sample factories hereafter referred to as names mentioned in the bracket. Primary and Secondary data has been used in the study. The secondary data – annual reports for seven years (2006-2012) collected from the select sample sugar factories. Other secondary data used in the study were obtained from various publications of - Indian Sugar Mills Association, New Delhi; South Indian Sugar Mills Association, Karnataka, Bangalore; National Federation of Co-operative Sugar Factories Ltd., New Delhi; Association of Karnataka Co-operative sugar Factories, Bangalore; Directorate of Sugar, Bangalore; Five Year Planning Commission, New Delhi; Food and Public Distribution Department, New Delhi; University of Agricultural Sciences library, Bangalore and the website Sugarbazar.com. Apart from the secondary data, the researcher collected primary data from the sample sugar factories by distribution of structured questionnaire to the head of Finance department regarding working capital management practices.

### Receivables Management Practices

In sugar industry only by-products i.e., co-generation, molasses and ethanol are sold on credit and no credit is offered for the sale of main product-sugar. All the sample sugar factories used credit as a method of motivating sales for by-products. None of the sample sugar factories have a separate department, which looks after credit and collection, since the business of selling by-products is not primary one. However, accounts and finance departments look after these functions. From the field study it is found that all the sample sugar factories discharge the functions debtors' management with the help of the accounts and finance department.

### Functions of Receivables Management Department

The functions of accounts and finance departments performed with regard to receivables are the decision to extend credit, follow-up and collection of receivables. These are additional responsibilities performed to their normal functions in all sample factories. Negotiation with party concerned; preparation and forwarding the bills; discounts and collections are the chief functions discharged by the accounts and finance departments in respect of trade credit. In all the sample factories the functions that are supposed to be taken up involving trade credit are very much limited in view of credit sales being confined to its by-products. In case of Bannari Amman sugars, the corporate office located in Coimbatore normally takes the decisions concerning trade credit.

### Formulation of the Credit Policy

Development of credit policy as discussed earlier is crucial in order to boost up the sales and also to exercise control over trade credit. The formulation of the overall credit policy is vested in the hands of top management in Prabhulingeswar and Athani. Chief Financial Officer (CFO) is responsible to develop a viable credit policy in Shree Renuka Sugars. The finance manager in liaison with unit head prepared the action plan for trade credit in Ugar. The authority to fix up credit limits for customers was, however delegated to finance manager in Bannari Sugars.

### Credit Terms

No specific credit terms were developed in Athani and Prabhulingeswar in which credit terms differ from customer to customer. Ugar, Shree Renuka and Bannari allow its customers a credit period of 15 days. All the sample factories allow interest free credit period. Credit facilities are extended for both private and government departments. There is no practice of providing cash discount facility in any of the sample sugar factories. None of sample factories initiated legal action against customers, since dues are collected / customers are paid within due date. All the factories primarily go through the annual accounts and financial reports of the customer's business line of activity.

### Factors Influencing Credit Policy

Customs and traditions in the industry are the base in formulating credit policy at Prabhulingeswar, Athani and Ugar, whereas Shree Renuka and Bannari are being influenced by both industry practices and self-imposed restrictions.

### Size of Investment in Debtors

Analysis of size of investment in debtors acts as an indicator of the type of credit policy - liberal or stringent followed by business firm. Table 1 provides the size of debtors and their growth in the selected factories and we can observe a mixed trend of ups and downs in the size and growth of debtors in the consolidated position over the years under study. The size of debtors ranges between the lowest of Rs.17,325.6 lakhs in 2006 to the highest of Rs.39,616.96 lakhs in the year 2010. Sugar industry has recorded 80.19 per cent increase over the first year of the study.

**Table 1: Sundry Debtors during 2006-2012 (Rs. in lakhs)**

Year	Athani	Bannari	Prabhuli-ngeshwar	Shree Renuka	Ugar	Consolidated
2006	56.7	6515.15	1415.28	5391.2	3947.27	17325.6
2007	28.41	7160.13	593.61	3868.5	2067.74	13718.39
2008	45.38	8347.26	985.69	4864	3592.66	17834.99
2009	75.79	6955.04	250.06	10426.5	2999.54	20706.93
2010	435.85	4491.48	137.16	31594	2958.47	39616.96
2011	737.72	9929.03	899.14	---	3390.97	32608.06
2012	82.66	9428.74	838	17651.2*	3519.41	31219.31
% Change over 2006	45.78	44.72	-40.78	227.41	-10.84	80.19

Note: \* 18 months ended 31-March 2012

Source: Compiled from the Annual Reports of Sample Sugar Factories

With regard to the individual sample sugar factories, on an average three (Athani, Shree Renuka, and Bannari) of the factories recorded increase in debtors and the other factories Prabhulingeshwar and Ugar registered declining trend. But, all the three sample sugar factories with positive growth also less than the industry growth rate.

#### **Total Sales and Total Debtors Relationship - Sugar Industry**

The sales and debtors over a period of time reveal interesting facts as to the credit policy of the factory is concerned. Company's credit policy is effective in stimulating sales, only when sales show a continuous upward trend accompanied by downward trend in debtors. But a reverse trend has unfavorable impact on sales and as well as on operating profits. Further, if the pace of increase in sales is more than that of debtors, it indicates though not an effective credit policy surely a fairly favorable policy.

Table 2 shows the relationship between total sales and total debtors in the sample sugar factories in Karnataka. In the overall position of selected sugar factories, the average rate of increase in sales was recorded at 318.44 per cent, which was more than that of the debtors 42.63 per cent.

**Table 2: Total Sales and Sundry Debtors during 2006-2012 (Rs. in lakhs)**

Year	Total Sales	Trend of Sales	Total Sundry Debtors	Trend of Debtors
2006	219010.4	---	21301.52	---
2007	205110.6	-6.78	16993.28	-25.35

2008	331603.5	38.15	21713.3	21.74
2009	387707.3	14.47	30883.37	29.69
2010	742387.2	47.77	71073.8	56.55
2011	213355.2	-247.96	49360.12	-43.99
2012	916434.8	76.72	30381.31	-62.47
Average	430801.2857	---	34529.52857	---
% of change over 2006	318.44	----	42.63	---
<b>Correlation between the Total Sales and Total Debtors = 0.434422</b>				

Source: Compiled from the Annual Reports of Sample Sugar Factories

It indicates that the sample sugar factories had followed a fairly favorable credit policy. With regard to the trends in sales and debtors there is less relationship between them. This was supported by the correlation (0.434422) between the total sales and total debtors.

#### **Total Sales and Total Debtors Relationship-in Individual Sugar Factories**

Table 3 shows the individual position of sample sugar factories with respect to relationship between total average sales and total average sundry debtors during the study period. In majority of the sugar factories the average rate of increase in sales was less than that of debtors over the figure 2006.

**Table 3: Total Average Sales and Total Average Sundry Debtors during 2006-2012 (Rs. in lakhs)**

Factory	Total Average Sales	% of Change over 2006	Total Average Sundry Debtors	% of Change over 2006
Athani	13714.55	62.1343	208.93	268.483
Bannari	83142.8	28.5097	7546.69	15.8329

Prabhulingeshwar	12397.22	80.2821	13020.84	141.52
Shree Renuka	255588.8	206.214	12299.23	128.135
Ugar	54942.97	11.2204	3210.866	-18.656

Source: Compiled from the Annual Reports of Sample Sugar Factories

In case of Shree Renuka, the rate of increase in sales was higher (206.214 per cent) compared to the other sample factories, and it is more than the debtors by 78.079 percent. It indicates that the three factories followed effective credit policy. On the other hand, Prabhulingeshwar and Athani the percentage change of sales over the 2006 is less than the percentage change over 2006. In Ugar and Bannari though the sales trend is higher than debtors, but is very less. It indicates that all the four factories did not follow effective credit policy.

Therefore, it clearly indicates that four the five sample sugar factories have negative correlation between sales and debtors. It indicates that they did not follow majority of the sugar factories pursued unfavorable credit policy and it is supported by Table 4.

Table 4: Coefficient of Correlation between Sales and Average Debtors from 2006 to 2012	
Name of the Factory	Coefficient of Correlation (r)
Athani	-0.44746
Bannari	-0.69510
Prabhulingeshwar	-0.80231
Shree Renuka	0.84903
Ugar	-0.45244

Source: Calculated from the Annual Reports of Sample Sugar Factories

### Ratio of Debtors to Sales

The proportion of debtors to sales is another test to assess the level of investment in debtors. The higher the ratio, the greater is the investment in debtors for the same volume of sales. However, a lower ratio will indicate the effectiveness of a firm in controlling its investment in receivables. In other words, an effective control of debtors may demand a lower percentage of receivables in relation to sales.

Table 5 shows the trade debtors as a percentage of sales in selected factories. The ratio of trade debtors to sales varied between the lowest 3.66 per cent in 2011 and the highest 15.93 in the year 2010. On an average the ratio of the sugar industry recorded at 7.12 per cent. The investment in debtors had been minimized since the ratio has come

down from 7.18 per cent in 2006 to 5.4 per cent by the end of 2012.

Table 5: Trade Debtors to Sales (in percent)						
Year	Athani	Bannari	Prabhulingeshwar	Shree Renuka	Ugar	Consolidated
2006	0.71	10.37	11.56	6.73	9.77	7.83
2007	0.39	9.00	3.93	5.28	11.23	5.97
2008	0.44	12.64	7.03	2.67	8.70	6.30
2009	0.57	10.01	1.36	4.67	7.32	4.78
2010	5.10	5.45	0.63	61.8	6.65	15.93
2011	4.85	5.39	2.37	---	5.70	3.66
2012	0.29	7.04	2.30	12.02*	5.35	5.4
Average	1.76	8.56	4.17	15.53	7.82	7.12

Note: \* 18 months ended 31-March 2012

Source: Computed from the Annual Reports of Sample Sugar Factories

With regard to the individual sugar factories, the ratio of debtors to sales showed a remarkable decline in Prabhulingeshwar and a marginal decline in Bannari and Ugar Sugar Works. While in the former the ratio steeply came down from 11.56 per cent in 2006 to 2.30 per cent by the end of study period 2012. In case of Bannari the ratio declined from 10.37 per cent in 2006 to 7.04 per cent in 2012, and Ugar's ratio shown decrease from 9.77 per cent in 2006 to 5.35 in 2012. In Shree Renuka the ratio fluctuated between the lowest 2.67 in 2008 and highest 12.02 in 2012 indicating increase in debtors, and Athani also shown the increase in debtors.

### Proportion of Debtors to Current Assets

Proportion of debtors to total current assets is expressed in terms of percentage in order to ascertain the share of debtors in them. The investment in accounts receivable formed third important component (Table 6) of current assets next to inventory and short-term loans and advances in the overall position of selected sugar factories which varied from a maximum of 13.72 per cent of current assets to a minimum of 5.59 per cent in 2012 during the period covered. But the percentage has shown declining trend over the study period. Put in simple, the ratio declined by 8.13 per cent and on an average the industry ratio recorded 8.4 per cent.

Table 6: Proportion of Debtors to Current Assets (in Percentage)						
Year	Athani	Bannari	Prabhulingeshwar	Shree Renuka	Ugar	Consolidated
2006	0.46	19.94	14.39	20.42	13.41	13.72

2007	0.19	16.59	8.44	11.54	4.45	8.24
2008	0.28	13.76	9.21	9.11	12.09	8.89
2009	0.69	13.74	2.27	5.25	10.34	8.67
2010	2.61	9.23	0.67	14.78	7.16	6.89
2011	3.21	11.88	4.37	---	7.84	6.80
2012	0.45	11.05	3.32	6.68*	6.94	5.59
Average	1.13	13.74	7	10.56	8.89	8.4

Note: \* 18 months ended 31-March 2012

Source: Computed from the Annual Reports of Sample Sugar Factories

Study of the ratio in the sample factories separately, the average percentage share of debtors in total current assets was higher than the industry in Bannari, Shree Renuka, and Ugar. But, over the study period all the sample sugar factories' debtors as percentage to current assets declined. The decline was marginal in Athani and also the minimum investment in debtors was found in Athani Sugars. The reason is that it allowed credit sales only for its byproduct due to which small portion of debtors prevailed.

### Ageing Schedule

The ageing of debtors classifies outstanding accounts receivables at a given point of time into different age categories.<sup>14</sup> The ageing schedule depicts varying degrees of delinquency in three or more classifications on time scale. A simplified approach may be to group book debts into two broad categories, normal and overdue accounts.

For instance, the overdue debts can be those that are outstanding for more than Six months. These outstanding can be expressed as a percentage of total debtors and the trends observed. If the amount of overdue debts keeps increasing in relation to total book debts, the collection and follow up efforts may be deemed to be poor and slack. Table 7 shows the quantum of trade debtors outstanding over six months. The percentage share of debts due more than six months had decreased from 19.77 per cent in 2006 to 19.19 per cent in by the end of study period. The trend was almost same with the all the sample sugar factories except Bannari. Bannari's share of debts due more than six months increased from 10.38 per cent in 2006 to 21 per cent by the end of study period. With regard to the share of debts less than six months, it was reverse, increased from 80.23 per cent in 2006 to 80.81 per cent by the end of the study period. The same trend was with all the sample factories except Prabhulingeshwar. Prabhulingeshwar's share of debtors less than six months declined from 89.79 per cent in 2006 to 87.92 per cent by the end of study period. Further, the percentage of share of debtors more than six months and less than six months was found to be fluctuating in all the sample sugar factories indicating that the collection policies and procedures of these factories were not stable and effective. In Athani there are no debt outstanding more than six months in the years 2008, 2011, and 2012, and no debt outstanding less than six months in the year 2010. It is interesting to note that in spite of large size of book debts in Renuka, Ugar and Bannari overdue amounts by six months was comparatively low indicating the efficiency of collection policies in this concern.

**Table 7: Ageing of Debtors in Select Sugar Factories from 2006 to 2012 (%)**

Year	Age of Debtors	Athani	Bannari	Prabhul-ingeshwar	Shree Renuka	Ugar	Consol-date
2006	> 6 months	0.19	10.38	10.21	18.87	40.18	19.77
	< 6 months	99.81	89.62	89.79	81.13	59.82	80.23
2007	> 6 months	0.60	31.75	53.52	16.18	30.59	28.06
	< 6 months	99.40	68.25	46.48	83.82	69.41	71.94
2008	> 6 months	Nil	44.69	35.88	28.42	4.03	31.46
	< 6 months	100	55.31	64.11	71.58	95.97	68.54
2009	> 6 months	72.54	24.84	9.08	3.96	6.52	11.66
	< 6 months	27.46	75.16	90.92	96.04	93.48	88.34
2010	> 6 months	100	1.93	15.59	3.29	7.10	4.53
	< 6 months	Nil	98.07	84.41	96.71	92.10	95.47
2011	> 6 months	Nil	4.42	11.13	---	9.49	7.90
	< 6 months	100	95.58	88.87	---	90.51	92.10
2012	> 6 months	Nil	21.00	12.08	9.71*	32.89	19.19
	< 6 months	100	79.00	87.92	90.29*	67.11	80.81

Note: \* 18 months ended 31-March 2012

Source: Compiled from the Annual Reports of Sample Sugar Factories

### Bad Debt Loss

The ratio of bad debts to debtors indicates the efficiency of management in keeping down the bad debts losses to a minimum level. If a firm has high bad debts losses, it indicates that the firm pursues a lenient credit policy. Moreover, an old account causes heavy collection expenses and increases bad debts losses.

Factory	2006	2007	2008	2009	2010	2011	2012
Athani	13.72	---	---	---	---	---	13.33
Bannari	0.08	0.24	0.20	0.02	1.56	---	0.288
Prabhulingeshwar	---	---	---	---	---	---	10.93
Shree Renuka	---	---	---	---	---	---	---
Ugar	---	---	0.31	---	0.026	0.354	3.913

Source: Computed from the Annual Reports of Sample Sugar Factories

The ratio of bad debts to receivable is recognized as a measure of the net consequences of credit decisions for the period under consideration.

Table 8 gives the ratio of bad debts to debtors in sample sugar factories. Shree Renuka Sugars do not have any bad debts loss. In case of Prabhulingeshwar first six years of study recorded no bad debt loss, but in the last year (2012) recorded 10.93 per cent of bad debt loss (Rs. 92.62 lakhs). In Athani the ratio of bad debts to debtors were found only in the year 2006 and in 2012, but the ratio had slightly declined from 13.72 percent to 13.33 percent (bad debts in Rs.11.02 lakhs). In case of Ugar Sugar Works Ltd, bad debt loss was recorded in 2008 (0.31 percent), 2010 (2.6 per cent), 2011 (0.354 per cent), and in 2012 (3.913 per cent). The ratio increased from 0.31 percent in 2008 to 3.93 per cent by the end of study period. In case of Bannari the ratio increased from 0.08 per cent in 2006 to 0.288 per cent by end of 2012. In the Prabhulingeshwar and Athani, though the bad debts were recorded in one and two years respectively, the ratio is very high.

### Ratio of Bad Debts to Sales

Bad debt losses affect profitability. The impact can be judged by comparing the ratio of bad debts to sales. The higher the proportion of bad debts to sales, lower the margin of profit on sales. Table 9 is given to show the ratio of bad debts to sales.

Factory	2006	2007	2008	2009	2010	2011	2012
Athani	0.10	---	---	---	---	---	0.038
Bannari	0.008	0.02	0.03	0.002	7.98	---	0.023
Prabhulingeshwar	---	---	---	---	---	---	0.251
Shree Renuka	---	---	---	---	---	---	---
Ugar	---	---	0.03	---	0.002	0.020	0.243

Source: Computed from the Annual Reports of Sample Sugar Factories

The trend of bad debts to sales ratio indicates more or less the same pattern as that of bad debts to debtors. It reveals that Prabhulingeshwar kept bad debt losses at a lower level comparatively other factories with bad debt loss. The highest bad debt loss of 7.98 percent (in 2010) was recorded with Bannari, and ratio of bad debts to sales increased over the study period from 0.008 percent in 2006 to 0.023 per cent by the end of study period 2012. It indicates the factory followed liberal credit policy. Ugar factory also has bad debts it may be due to liberal credit policy.

### Debtors' Turnover and Average Collection Period

The debtors' turnover ratio helps to measure the liquidity of debtors of a business undertaking. Put in simple, it shows the efficiency in using the funds invested in debtors. Debtors is one the components of current assets. Increase in the volume of debtors without corresponding increase in total current assets, may cause decrease in the volume of investment in the other current assets. If investment in debtors is reduced, it may in turn affect total sales and consequently reduces the profits of the firm.<sup>15</sup> Higher debtors' turnover coupled with the quick collection of debtors enables a business to transact a larger volume of business without corresponding rise in the investment in debtors. Thus, an insight into the firm's turnover and collection period of debtors reveals the credit policy followed by it. Some prefer to divide sales by the average book debts for the year (the average book debts at the beginning and at the end of the year) to get a more reliable indicator. It can be calculated as follows:

1. Total Net Sales (S)
2. Average Debtors (D), i.e., (Opening debtors + Closing debtors)/2 (D)
3. Turnover of debtors (S/D) and
4. Average collection Period  $[365/(S/D)]$

The average collection period refers the average time lag in



days between sales date and collection of the credit sales. The period is the number of days credit given to trade debtors. Hence, it is a significant measure of collection activity, and quality of accounts receivable. In other words, it measures the quality of debtors as it indicates the rapidity of sluggishness of their collection activity. In shorter the average collection period, the better the quality of debtors, since short collection period results in timely and prompt payment by debtors. For higher profitability a high turnover of inventory should be accompanied by prompt collection of debtors. Lower debtors' turnover and longer average collection period indicates liberal credit policy of a firm implying thereby an ineffective credit management. On the other hand, the higher the debtors' turnover the more effective and more rewarding the investment made in debtors. The turnover rate and average collection period, thus, give an overall measure of efficiency in management of trade debt.

Table 10 depicts the turnover ratio debtors and their average collection period in sample sugar factories. On an average the debtors' turnover ratio was recorded high in Athani with 118.72 times followed by the Prabhulingeshwar (38.86 times), and Shree Renuka (26.77 times). The other two – Ugar and Bannari was recorded at 14.09 times and 11.26 times respectively. The average collection period was high (32.42 days) in Bannari, followed by Ugar (25.9 days), Shree Renuka (13.63 days), and Prabhulingeshwar (9.39 days). The least collection period was recorded in Athani with 3.07 days.

In Prabhulingeshwar, the debtors' turnover ratio ranged between the lowest of 13.26 times in 2006 and 112.33 times in 2010. It is found that the debtors' turnover ratio had significantly risen, up to 2010 (rising from 13.26 times in 2006 to 112.33 times in 2010) which however declined to 41.88 times by the end of study period. Consequently, average collection period had declined from 27.53 days in 2006 to 8.71 days by the end of study period. It indicates that funds were released from debtors.

Table 10: Debtors' Turnover and Average Collection Period during 2006 to 2012 in Select Sugar Factories (in times)						
Year	Debtors Turnover/ Collection Period	Athani	Bannari	Prabhulingeshwar	Shree Renuka	Ugar
2006	DTR	27.95	10.58	13.26	21.74	12.79
	CP	13.06	34.50	27.53	16.79	28.54
2007	DTR	172.48	11.64	15.05	15.82	6.12
	CP	2.12	31.36	24.25	23.07	59.64
2008	DTR	281.99	8.52	17.76	41.78	14.60
	CP	1.29	42.84	20.55	8.74	25.00

2009	DTR	218.91	9.08	29.71	29.22	12.43
	CP	1.67	40.20	12.28	12.49	29.36
2010	DTR	33.38	15.32	112.33	26.23	14.93
	CP	10.93	23.83	3.25	13.92	24.22
2011	DTR	26.09	11.43	42.04	---	18.72
	CP	13.99	31.93	8.68	---	19.50
2012	DTR	70.21	12.23	41.88	25.84*	19.01
	CP	5.19	29.84	8.71	14.12*	19.20
Average	DTR	118.72	11.26	38.86	26.77	14.09
	CP	3.07	32.42	9.39	13.63	25.90

Notes: 1. Debtors Turnover expressed in times and Collection Period in days

2. DTR: Debtors Turnover Ratio; CP: Collection Period

3. \* 18 months ended 31-March 2012

Source: Compiled from the Annual Reports of Sample Sugar Factories

In Athani the debtors' turnover ratio had shown an extremely increasing trend over the years from 27.9 times in 2006 to 70.21 times by the end of study period. As a result, the average collection period had come down from 13.06 days in 2006 to 5.19 days by 2012. It indicates that the investment in debtors is very low and it shows that company follows stringent credit policy.

Shree Renuka is the only unit wherein more or less consistent policy had been pursued in collecting debts. The turnover of debtors varied from 15.82 times in 2007 to 41.78 times in 2008. The collection period of debtors also fluctuated from a very low range of 8.74 days in 2008 to 23.07 days in 2007. The sales manager of Shree Renuka pointed out that as a matter of policy, the company does not allow credit sales but for the by-product the company would allow credit sales. This is reason why the collection period appears to be so slow. In Ugar, the debtors' turnover varied between 6.12 times in 2007 and 19.01 times in 2012. Debtors' collection period was high 59.64 days in 2007 and low in the year 2012.

In Bannari, the debtors' turnover ratio is maintained between 8.52 times in 2008 and 12.23 times in 2012. The average collection period ranged between 42.84 days in 2007 and 23.83 days in 2010 indicating greater tie-up of funds in receivables with respect to sales. In the middle of the years of the study, company could speed-up the collections.

## Results and Discussion

Sale of goods on credit is a tool to maximise sales. Receivables refer the amount owed by the buyer to the



firm when firm sell goods on credit. Two factors affect the level of investment in receivables - requirement of the customer and the credit sanctioning capacity of the firm. The following findings have been extracted from analysis and field work:

- Sugar factories manufacture sugar and during the manufacturing process some by-products i.e., co-generation, molasses and ethanol produced. Only those by-products are sold on credit and not the regular sugar.
- Since only by-products which are in less value are sold on credit. Hence, no separate department setup by sample factories to look after credit and collections. However, the functions of credit department were carried out by sales, accounts and finance departments in liaison with each other.
- Credit policy is formulated by the top management in Prabhulingeshwar and Athani. Chief Financial Officer (CFO) is responsible for developing a viable credit policy in Shree Renuka Sugars. In Ugar Sugar Works, the finance manager in liaison with unit head prepares the action plan for trade credit in Ugar. The authority to fix up credit limits for customers was, however delegated to finance manager in Bannari Sugars.
- Credit terms vary from factory to factory. There were no credit terms used in Athani and Prabhulingeshwar in which credit terms differ from customer to customer. Ugar, Shree Renuka and Bannari allow its customers a credit period of 15 days. All the sample sugar factories provide interest free trade credit. Credit facilities are extended for both private and government departments by all the factories. Cash discount facility practice is not found in any of the sample sugar factories.
- Customs and traditions in the industry are the criteria in formulating credit policy in Prabhulingeshwar, Athani, Ugar Sugar Works; and Shree Renuka Sugars and Bannari Sugars are being influenced by both industry practices and self-imposed restrictions.
- Sugar industry recorded increase in sales revenue, which was more than that of the debtors. However, the trend in sales and debtors there is less relationship between them. It indicates that the sample sugar factories had followed a fairly favorable credit policy.
- The investment in debtors had been minimized. With regard to the individual sugar factories, the ratio of debtors to sales showed a remarkable decline in Prabhulingeshwar and a marginal decline in Bannari and Ugar Sugar Works.
- The investment in accounts receivable formed

third important component of current assets with a declining trend. Study of the ratio reveals, the average percentage share of debtors in total current assets was higher than the industry in Bannari, Shree Renuka, Ugar and Prabhulingeshwar. The decline was marginal in Athani and also the minimum investment in debtors was found in Athani Sugars. The reason is that it allowed credit sales only for its byproduct due to which small portion of debtors prevailed.

- The percentage share of debts due more than six months had decreased. The trend was almost same with all the sample sugar factories except Bannari. With regard to the share of debts less than six months, it was increased. The same trend was with all the sample factories except Prabhulingeshwar. Prabhulingeshwar 's share of debtors less than six months declined. Further, the percentage of share of debtors more than six months and less than six months was found to be fluctuating in all the sample sugar factories indicating that the collection policies and procedures of these factories were not stable and effective. It is interesting to note that in spite of large size of book debts in Renuka, Ugar and Bannari overdue amounts by six months was comparatively low indicating the efficiency of collection policies in this concern.
- Shree Renuka Sugars do not have any bad debts loss. In case of Prabhulingeshwar first six years of study recorded no bad debt loss, but in the last year of study the factory written off of Rs. 92.62 lakhs. In Athani the ratio of bad debts to debtors were found only in two years, but the ratio had slightly declined. Bannari and Ugar have bad debt losses. In the Prabhulingeshwar and Athani, though the bad debts were recorded in one and two years respectively, the ratio is very high. The trend of bad debts to sales ratio indicates more or less the same pattern as that of bad debts to debtors. It reveals that Prabhulingeshwar kept bad debt losses at a lower level comparatively other factories with bad debt loss. Bannari and Ugar followed liberal credit policy.
- On an average the debtors' turnover ratio was recorded high in Athani, Prabhulingeshwar, and Shree Renuka. The other two – Ugar and Bannari 's debtor turnover was less. The average collection period was high in Bannari, Ugar, Shree Renuka, and Prabhulingeshwar. In Athani the debtors' turnover ratio had shown an extremely increasing trend over the years. As a result, the average collection period had come down. It indicates that the investment in debtors is very low and it shows that company follows stringent credit policy. Shree Renuka is the only unit wherein more or

less consistent policy had been pursued in collecting debts. The sales manager of Shree Renuka pointed out that as a matter of policy, the company does not allow credit sales but for the by-product the company would allow credit sales. This is reason why the collection period appears to be so slow.

### Suggestions

Based on the finds the following suggestions offered for betterment of receivables management in select sugar factories, may also apply for private sugar industry in Karnataka:

- As studied above credit policy is formulated at the top-level management, indicating that, no separate department set-up by sample factories to look after credit and collections. The functions of credit department were carried out by sales, accounts and finance departments in liaison with each other. However, it is better to have a separate department or section to look sanction of credit and collection of debtors. The department should have different credit policies, develop methods to evaluate the credit worthiness of a prospective customer, develop procedures for collection of debt and follow-up action for collection of overdues as early as possible. The credit and collection department should work in association with marketing and accounts departments.
- The investment in accounts receivable formed third important component of current assets. Steps need to be taken to reduce investment in debtors – One, adopting stiff credit standards would benefit factories as it avoids unnecessary blocking of funds and Two, to speed up collections from customers adopting concentration banking as collection technique. Both these helps reduce the problem of shortage of working capital.
- Normally aging schedule was prepared for six months. But, in the present study, ageing schedule of debtors has to be prepared for various periods - three months, nine months and 12 months keeping in view the measures to be taken to reduce aging of debtors and reduce bad debt losses. Evaluating applicants with the use of discriminant analysis; offering cash discount may encourage timely payment which reduces aging of debtors. Preparation of regular monthly reports on overdues and submitting the same to management to improve collections from debtors. There appears to be dues from government departments. They should pay and settle dues to the factories on time and avoid inordinate delay which has taken place now.

### References

- Vijayakumar, A. (1998). A Comparative Study of Working Capital Management in Co-operatives and Private Sector Companies in the Sugar Industry of Tamil Nadu. *Finance India*, Vol. 7, Issue.4, Pp.1119-1125.
- Government of Maharashtra. (1990). *Report of the Committee for Recommending a Package for Rehabilitation of Sick Sugar Factories in Co-operative Sector*.
- Gowda, K. (1984). *The Geo-metric Problems and Prospects of Sugar Industry in Karnataka (1971-1981)*. Ph.D. Thesis submitted to University of Mysore, Mysore.
- Vijayarajan, A. (1984). *The Impact of Agro-based Industries on the Agricultural Economy of Madurai District with special reference to Sugar Industry*. Ph.D. Thesis submitted to Madurai Kamaraj University, Madurai.
- Patel, K.S. and Ashturkar, B.W. (1992, September). Sickness of Sugar Industry in Marathwada Region: An Economic Analysis. *Bharatiya Sugar*, Pp.11-16.
- Vijayakumar, A. and Venkatachalam, A. (June, 1995). Working Capital and Profitability: An Empirical Analysis. *The Management Accountant*, ICAI, Pp.748-750.
- Sopan N.P. (1996). *A Study of Managing Cost and Productivity of Co-operative Sugar Industry in Solapur District*. Ph.D. Thesis submitted to Shivaji University, Kolhapur.

# An Assessment of Technological, Pedagogical Content Knowledge of in Service Teachers

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## Abstract

*In the present world of globalization, digitalization and high use of technology teaching learning process has undergone a huge change. Now a days teaching is no more mere a transaction of information. In the present scenario education is becoming child –centred and for the same emphasize is being laid on blend of new innovative strategies in teaching learning process. To make teaching learning process more effective and fruitful it is necessary to introduce innovative ideas and practices in it. Technology has affected almost each and every of our life, area of education also is not left untouched from it. Use of technology in teaching learning process has also broaden the area of innovations in it. It has brought revolutionary changes in field of education. Now conventional and traditional classrooms are replaced with digital classroom, virtual classrooms are taking place of physical presence of a teacher. Students are no more confined to the textbooks, a lot of information is available on digital sources. In many schools education is imparted in digital classrooms and the way technology is affecting our life it indicates that future classrooms will be digital classrooms. In a technology integrated classroom it is essential that a teacher should have a skill to integrate technology effectively with teaching –learning process. For the same; Technological Pedagogical content Knowledge Framework has been introduced by Koehler & Mishra. Technological Pedagogical content knowledge (TPACK) is defined as a framework of teacher knowledge for technology integration. Teacher knowledge is defined as a complex interaction and intersection among three bodies of knowledge within the framework of TPACK: content, pedagogy and technology (Koehler & Mishra, 2008). In the present paper researcher has made an attempt to assess technological pedagogical content knowledge of pre-service teachers for the same questionnaire developed by Schmidt, Baran, Thompson, Mishra, Koehler and Shin (2009) was used as tool. 25 in service teachers of MCD and Directorate of Education of district north were the sample of study. The study is descriptive in nature survey method was used.*

**Keywords:** Digitalization, Innovative Teaching Methods, Technological Pedagogical Content Knowledge, Technology Integrated Classrooms.

## Introduction

Technological Pedagogical Content Knowledge Framework (TPACK) explains what sort of knowledge teacher should have to make his/her teaching more effective. The TPACK framework builds on Shulman's description of PCK to describe how teacher's understanding of educational technologies and PCK interact with one another to produce effective teaching with technology. Other authors have discussed similar ideas though often using different labelling schemes. The conception of TPACK described here has developed over time and through a series of publications with the most complete description of the framework found in Mishra and Koehler (2006) and Koehler and Mishra (2008). "In the present scenarios use of technology in teaching learning process is increasing

day by day as it helps in making teaching learning process more and more effective. Use of technology in classrooms has brought revolutionary changes now teaching is no more simply imparting of knowledge or information. No doubt classrooms are full of challenges for a teacher in a way a variety of talents in students and the variety of knowledge they carry with them. Integration of technology with teaching learning process too poses a challenge before the teachers as mere knowledge of how to make use of technology is not enough to integrate technology with teaching. In order to make teaching effective a teacher must understand how technology, pedagogy and content are interrelated. (Mathed J. Koehler, Punya Mishra and William Cain)," The TPACK framework builds on Shulman's

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(1986,1987) descriptions of PCK to explain how teacher's understanding of educational technologies and PCK interact with one another to produce effective teaching with technology. Teachers usually have insufficient and inadequate knowledge and experience of making use of technology in teaching learning process. Many teachers have earned their degrees when use of technology in teaching learning process was not used at all. This too poses a challenge in making use of technology in teaching learning process. The Technological, Pedagogical content knowledge frame work consists of three major terms i.e. Technological knowledge, Pedagogical knowledge and content knowledge. The understanding of these three separately is not required for effective teaching instead the interrelation of these three should be understood by a teacher for effective teaching. The interrelation of these three is shown below.

**Technology Knowledge:** According to Koehler and Mishra ,”This includes understanding information technology broadly enough to apply it productively at work and in everyday life, being able to recognize when information technology can assist or impede the achievement of a goal and being able continually adapt to changes in information technology.”(Koehler and Mishra)

**Pedagogical Knowledge:** According to Koehler and Mishra,” Teachers deep knowledge about the processes and practices or methods of teaching and learning .They encompass,among other things,overall educational purpose,values and aims. This generic form of knowledge applies to understanding how students learn, general classroom management skills,lesson planning and student assessment”(Koehler & Mishra 2009)It requires knowledge of social, cognitive& developmental theories & their application in classroom. How students construct knowledge & and acquire skills.

**Content Knowledge:** Teachers knowledge about the subject matter to be learned or taught. The content to be covered in middle school science or history is different from the content to be covered in an art appreciations or a graduate seminar on astrophysics”(Koehler & Mishra 2009). It includes knowledge of concepts, theories etc.

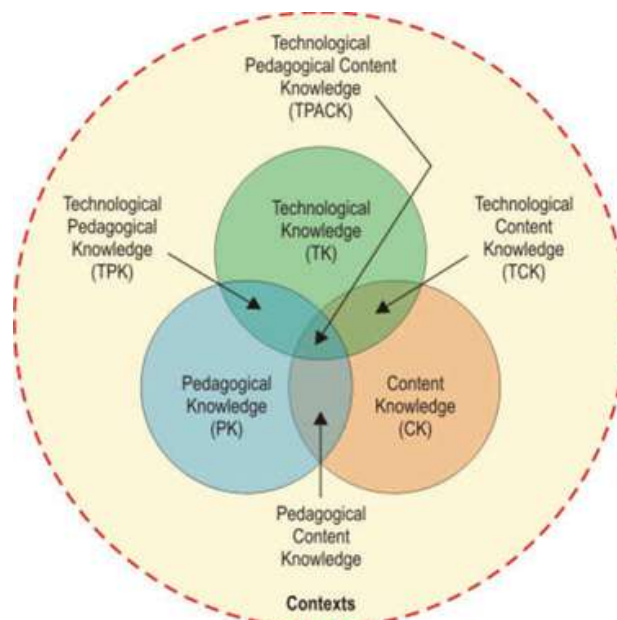
**Pedagogical Content Knowledge:** Pedagogical content knowledge reflects that isolated understanding of pedagogy and content is not sufficient for effective teaching. It also reflects that different content is taught by different methods. It links together Pedagogical and content knowledge.

**Technological Content Knowledge:** It links the knowledge of technology and content together. This knowledge

makes it possible to understand what technology can do for certain pedagogic goals and for teachers to select the most appropriate tool based on its appropriateness for the specific pedagogical approach.

**Technological Pedagogical Knowledge:** In words of (Mark Anderson),”Technological Pedagogical Knowledge is an understanding of how teaching and learning can change when particular technologies are used in a particular way.

**Technological Pedagogical Content Knowledge:** Technological Pedagogical Content Knowledge describes the synthesized knowledge of the bodies of knowledge described above, with a focus upon how technology can be uniquely crafted to meet pedagogical needs to teach certain content in specific context.



## Literature Review

(Mathew J. Kohler, Punya Mishra, Mete Akeoglu, Joshua M. Rosenberg),” The TPACK framework describes the kind of knowledge that teachers need in order to teach with technology, and the complex ways in which these bodies of knowledge interact with one another. Teacher must understand how technology, pedagogy and content interrelate and create a form of knowledge that goes beyond the three separate knowledge bases.” Knowledge of technology, content and pedagogy must be interrelated to integrate technology in teaching. Knowledge of technology isolated is not sufficient enough for teacher. (Mathew J. Koehler, Punya Mishra, Mete Akcaogh, Joshua M. Rosenberg),” In the TPACK framework what



teacher needs to know is characterized by three broad knowledge bases-technology, pedagogy and content-and the interaction between and among these knowledge bases. In this approach, technology in teaching is characterized as something well beyond isolated knowledge of specific hardware or software. Good teaching with technology, therefore cannot be achieved by simply adding a new piece of technology upon existing structure. Good teaching with technology requires a shift in existing pedagogical and content domains. (Mathew J. Koehler and Punya Mishra), "Teaching with technology is complicated further considering the challenges newer technologies present to teachers. In our work, the word technology applies equally to analog and digital as well as new and old technologies. As a matter of practical significance, however, most of the technologies under consideration in current literature are newer and digital and have some inherent properties that make applying them in straightforward ways difficult.", "At the heart of good teaching with technology are three core components, content, pedagogy and technology, plus relationships among and between them. The interactions between and among the three components, playing out differently across diverse contexts, account for the wide variation seen in the extent and wide variations seen in the extent and quality of educational technology integration."

**Objective:** To study the Technological Pedagogical Content Knowledge of the in-service teachers.

**Sample:** 25 in-service primary teachers were the sample of the study

**Delimitation:** Only 25 primary in-service teachers of district north were the sample of the study.

**Tools and Methodology:** The study was qualitative in nature. Questionnaires developed by Matthew J. Koehler, Punya Mishra and Tal Shin (Version March 3 2009) was used as tool of the study.

### Data Analysis

Technology is a broad concept that can mean a lot of different things. For the purpose of this questionnaire, technology is referring to digital technology/technologies. That is, the digital tools we use such as computers, laptops, iPods, handhelds, interactive whiteboards, software programs, etc. Please answer all of the questions and if you are uncertain of or neutral about your response you may always select "Neither Agree or Disagree"

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
<b>TK (Technology Knowledge)</b>					
1. I know how to solve my own technical problems.	0	6	9	9	1
2. I can learn technology easily.	0	8	9	6	2
3. I keep up with important new technologies.	0	15	3	7	0
4. I frequently play around the technology.	0	5	14	6	0
5. I know about a lot of different technologies.	0	12	7	6	0
6. I have the technical skills I need to use technology.	0	9	8	7	1
7. I have had sufficient opportunities to work with different technologies.	0	10	7	5	3
<b>CK (Content Knowledge)</b>					
8. I have sufficient knowledge about mathematics.	0	6	3	11	5
9. I can use a mathematical way of thinking.	0	8	6	8	3
10. I have various ways and strategies of developing my understanding of mathematics.	0	5	10	8	2

<b>Social Studies</b>					
11. I have sufficient knowledge about social studies.	0	8	3	12	2
12. I can use a historical way of thinking.	0	9	8	6	2
13. I have various ways and strategies of developing my understanding of social studies.	0	5	6	13	1
14. I have sufficient knowledge about science.	0	8	2	13	2
15. I can use a scientific way of thinking.		5	6	11	3
16. I have various ways and strategies of developing my understanding of science.	0	11	5	9	0
<b>Literacy</b>					
17. I have sufficient knowledge about literacy.	0	7	9	9	0
18. I can use a literary way of thinking.	0	5	11	9	0
19. I have various ways and strategies of developing my understanding of literacy.	0	7	10	8	0
<b>PK (Pedagogical Knowledge)</b>					
20. I know how to assess student performance in a classroom.	0	4	6	12	3
21. I can adapt my teaching based-upon what students currently understand or do not understand.	0	3	6	12	4
22. I can adapt my teaching style to different Learners.	0	0	6	15	4
23. I can assess student learning in multiple ways.	0	5	4	11	5
24. I can use a wide range of teaching approaches in a classroom setting (collaborative learning, direct instruction, inquiry learning, problem/project based learning etc.).	0	9	6	9	1
25. I am familiar with common student understandings and misconceptions.	0	4	4	12	5
26. I know how to organize and maintain classroom management.	0	3	5	11	6
<b>PCK (Pedagogical Content Knowledge)</b>					
27. I know how to select effective teaching approaches to guide student thinking and learning in mathematics.	0	7	5	12	1
28. I know how to select effective teaching approaches to guide student thinking and learning in literacy.	0	3	9	11	2



29. I know how to select effective teaching approaches to guide student thinking and learning in science.	0	2	6	12	5
30. I know how to select effective teaching approaches to guide student thinking and learning in social studies.	0	4	8	11	2
<b>TCK (Technological Content Knowledge)</b>					
31. I know about technologies that I can use for understanding and doing mathematics.	0	8	4	8	5
32. I know about technologies that I can use for understanding and doing literacy.	0	12	4	9	0
33. I know about technologies that I can use for understanding and doing science.	0	14	3	8	0
34. I know about technologies that I can use for understanding and doing social studies.	0	11	5	6	3
35. I can choose technologies that enhance the teaching.	0	4	10	8	3
36. I can choose technologies that enhance students' learning for a lesson.	0	4	9	9	3
37. My teacher education program has caused me to think more deeply about how technology could influence the teaching approaches I use in my classroom.	0	5	7	10	3
38. I am thinking critically about how to use technology in my classroom.	0	10	7	5	3
39. I can adapt the use of the technologies that I am learning about to different teaching activities.	0	3	4	11	7
<b>TPACK (Technology Pedagogy &amp; Content Knowledge)</b>					
40. I can teach lessons that appropriately combine mathematics, technologies and teaching approaches.	0	8	0	14	3
41. I can teach lessons that appropriately combine literacy, technologies and teaching approaches.	0	10	8	6	1
42. I can teach lessons that appropriately combine science, technologies and teaching approaches.	0	9	6	10	0

43. I can teach lessons that appropriately combine social studies, technologies and teaching approaches.	0	7	7	11	0
44. I can select technologies to use in my classroom that enhance what I teach, how I teach and what students learn.	0	12	4	9	0
45. I can use strategies that combine content, technologies and teaching approaches that I learned about in my coursework in my classroom.	0	4	9	12	0
46. I can provide leadership in helping others to coordinate the use of content, technologies and teaching approaches at my school and/or district.	0	11	4	6	4
47. I can choose technologies that enhance the content for a lesson.	0	10	8	7	0

### Technological Knowledge

Majority of teachers i.e. 17 out of 25 either disagree or neither agree or disagree with the statement that I can learn technology easily.

A large number of teachers i.e. 15 out of 25 disagree that I keep up with important new technologies.

10 teachers out of 25 disagree with the statement that I have sufficient opportunities to work with different technologies.

12 teachers out of 25 disagree that I know about a lot of different technologies.

10 teachers disagree that I keep up with important new technology.

Only a few teachers agree that I have the technical skill I need to use technology.

Above data reflects that teachers have very less amount of technological knowledge. Ample emphasis should be laid to enhance teachers technological knowledge as in lack of the same they are unable to make use of various technology in their classrooms. If the teachers are technologically literate they can make use of technology while teaching learning process and can make their teaching more effective.

### Content Knowledge

44% teachers agree that they have sufficient knowledge about mathematics.

A large number of teachers i.e. 32% teachers disagree and 24% teachers neither disagree nor agree with the statement that I can use mathematical way of thinking.

Majority of teachers neither disagree nor agree with statement that I have various ways and strategies of developing my understanding of mathematics.

Majority of teachers agree that they have sufficient knowledge about social studies.

A large number of teachers agree that I have various ways and strategies of developing my understanding of social studies.

52% teachers agree that I have sufficient knowledge about science.

From the above data it can be concluded that content knowledge of teachers is better than technological knowledge of teachers.

### Pedagogical Knowledge:

48% teachers agree that I know how to assess students performance in class, I can adapt my teaching based upon what students currently understand or do not understand and I am familiar with common student understanding and misconceptions.

60% teachers agree with the statement that I can adapt my teaching style to different learners.

44% teachers agree that I can assess student learning in multiple ways and I know how to organise and maintain classroom management.

A large number of teachers either disagree or neither agree or disagree with the statement that I can use a wide range of teaching approaches in a classroom setting.

Above data shows that pedagogical knowledge of teachers too needs improvement still it is better than technological knowledge of the teachers.

### **Pedagogical Content Knowledge**

Almost 50% teachers either disagree or neither agree or disagree with the statement that I know how to select effective teaching approaches to guide student thinking and learning in mathematics.

50% teachers agree that I know how to select effective teaching approaches to guide student thinking and learning in literacy.

Almost 50% teachers agree that I know how to select effective teaching approaches to guide student thinking and learning in science and social science.

Results shows that only 50% teachers are having command on pedagogical content knowledge where as rest of 50% teachers are having lack of the same.

### **Technological Content Knowledge**

50% teachers either disagree or neither agree or disagree with the statement that I know about technologies that I can use for understanding and doing literacy.

50% teachers disagree and only 36% teachers agree that I know about technologies that I can use for understanding and doing literacy.

40% teachers agree that my teacher education programme has caused me to think more deeply about how technology could influence the teaching approaches I use in my classroom.

From the results it can be concluded that Technological content knowledge of teachers needs improvement and results also reflects that majority of teachers agree that use of technology in classroom can influence their teaching.

### **Technological Pedagogical Content Knowledge**

28% teachers disagree and 28% teachers neither agree nor disagree with the statement that I can teach lessons that appropriately combine social studies technologies and teaching approaches.

48% teachers disagree with the statement that I can select technologies to use in my classroom that enhance what I teach how I teach and what students learn.

44% teachers disagree that I can provide leadership in helping others to coordinate the use of content, technologies and teaching approaches at my school or district.

Results reflects that Technological Pedagogical Content Knowledge of teachers is not good and it needs improvement

### **Conclusion**

From the above results it can be concluded that majority of teachers are having lack of technological knowledge. A large number of teachers have command on content knowledge, Pedagogical knowledge and pedagogical content knowledge. Majority of teachers lack Technological Content Knowledge and Technological Pedagogical Content Knowledge.

### **Suggestions**

Results shows that majority of teachers have command on content knowledge as well as on pedagogical knowledge but they lack technological knowledge. In the present world of digitalization it is necessary that teachers should have ample amount of Technological Pedagogical Content Knowledge. For the same teachers should be made technological literate. In pre-service teacher education programme curriculum ample emphasis should be laid on Technological Pedagogical and content knowledge. To enhance Technological Pedagogical Content Knowledge of In –Service teachers In –Service teacher training programme regarding the same should be organised.

### **References**

- TPACK- PunyaMishra,s web
- [www.Punyamishra.com/research/tpack](http://www.Punyamishra.com/research/tpack)
- What is Technological Pedagogical Content Knowledge
- [www.citejournal.org/wp-content/uploads/2016/oyvgi](http://www.citejournal.org/wp-content/uploads/2016/oyvgi)

- The Technological Pedagogical Content Knowledge
- Cemca.org in/ckfinder/userfiles/files/ICTteacher
- Punya Mishra' s web- Living at the junction of education
- www.punyamishra.com
- What is Technological Pedagogical Content Knowledge
- www.citejournal.org/vo19/general/article1.cfm
- TPCK|EducationalTechnology|Learning
- www.scribol.com|document/68348329/TPCK
- Technological Pedagogical Content Knowledge A cite seerx
- C i t e s e e r x . i s t . p s u . e d u / v i e w d o c / download?doi=10.1.1.523
- Introducing Technological Pedagogical Content Knowledge
- www.matt-koehler.com/publications/Mishra-koehler-AERA-
- matthewj.koehler,punyamishra and William cain,Michigan
- w w w . b u / e d u / - - / f i l e s / 2 0 1 4 / 0 2 / B U J O E - 193.3.koehleretal Pdf.
- TPACK- Technological Pedagogical and Content Knowledge tpack.org.

# Problems faced by Youth: An Exploratory Study

Ms. Seema Sharma\*    Mr. Anupam Sharma\*\*

## Abstract

*We all know that adolescence is the crucial stage of life. Individual faces lots of changes in body and finds it difficult to cope with those changes. Lack of awareness and rigid behaviour of family members make this phase more typical for the adolescent. This time is not only important to make one's identity but also the set and proceed for his/her carrier goal. In Indian context the youth came across relatively higher rate of challenges. The researcher made an attempt to make an intense study on the problems faced by the youth. The present study is based on the primary data. For the collection of data, researcher had selected 10 college going youth and the sampling technique is convenience sampling. Researcher has used the Youth Problem Inventory developed by Dr. (Mrs.) Mithlesh Verma in 2012. The study explored that most of the youth is facing problems in different areas. The areas which have the alarming situation is family and personal, in both the cases the scores are high.*

**Keywords :** Youth, Adolescence and Transitional Stage

## Introduction

Adolescence is the phase of Transition from being a child to an adult. It extends from 12-19 years. This transition involves biological (puberal), psychological and social changes.

“Adolescence is the period which is characterized by sexual, social, occupational and ideological adjustment and striving independence from parents”. -Kuhlen

“The one word which best characterizes adolescence is ‘change’. The change is physiological, sociological and psychological”. -Bigge and Hunt

## Characteristics of Adolescence

### Physical-

- Increase in height and weight
- Rapid development of bones and muscles
- Changes in bodily proportions
- Change in voice
- Changes in motor performance
- Increased size of genital organs
- Hair growth
- Increase in blood pressure and pulse rate
- Change in physiological systems

### Emotional-

- Heightening of emotions
- Variations in emotional moods
- Complexity
- Development of inferiority complex
- Development of abstract emotions
- Realism in emotional experiences
- Capacity of sharing emotions
- Widened loyalties
- Increased compassion
- Auto-eroticism
- Emotion of anger, worry and jealousy

### Intellectual-

- Development of intelligence
- Increase in span of attention
- Development of memory
- Development of abstract thinking
- Development of generalization
- Development of problem solving ability
- Ability of making decisions
- Development of imagination
- Widening of interests

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**Social-**

- Sex consciousness
- Social consciousness
- Group loyalty
- Social service

**Problems of Adolescence-**

- Adjustments to physical growth
- Adjustment to mental competition
- Adjustment to emotional disturbances
- Problem of adjustment in family
- Problem of adjustment with friends
- Problem of sex adjustment
- Problem of adjustment with society

**Strategies to deal with these problems:**

- Physical exercises
- Appropriate lectures and sex education
- Sympathetic and affectionate attitude
- Democratic atmosphere
- Co-curricular activities
- Tasks of responsibility
- High moral and religious education
- Co-operation of parents
- Community service
- Guidance centers

The youth problem inventory is to assess the problems of adolescents and youth. The adolescence stage is divided into three stages i.e. early adolescence, middle adolescence and late adolescence. The early adolescence is from 12-14 years, middle adolescence is 14-17 years and late adolescence is 17 to 19 years. YPI can be used to assess the problems in all the three stages and can be best utilized in later stages as middle and later adolescence is the transition stage for adulthood and better called as youth. They have immense potential, imagination and self-reliance but the only thing is that these stages should be effectively dealt and adolescent had full support from family, school and society. Unfortunately this not the case, majority of adolescents harness their energy in solving the conflicts of their identity. Adolescence is the utmost important and critical period of individual's development with which family and teacher has to deal. Adolescents have to face various difficult situations and education should be organized to empower them to face all the problems of life. Adolescence refers to the period of

development and adjustment during the transitional period between childhood and adulthood. This period develops from childhood and amalgamates into adulthood. Youth is an important asset for the country. The development and prosperity of the country depends on the worth of its youth. Proper development, proper psychological and vocational guidance can empower the youth and can channelize their energy in positive direction, in the absence of which they are more prone to delinquency, indulging in negative activities, substance abuse etc. In this situation the youth becomes the problem for the nation, their inferiority, disappointment and frustration ultimately harms society. The biggest responsibility of any country is the best management of their youth resource and this can be done with the help of strong education and support system. Parents, teachers and youth all should be aware about the changes, challenges and problems of this stage and they should be empowered to deal with these in an effective manner. In India the biggest problem is of unawareness. Parents are not aware about psychological changes which take place during this stage and their behaviour makes it more problematic for the youth to cope with their physical, emotional and psychological changes. Adolescence is one of the important stages of an individual's life. It is characterized by numerous and unique problems. The child passes through physiological and psychological changes and face difficulties in social adjustments. From the biological perspective, adolescence is the stage when puberty dawns. Physiological, sexual and psychosocial changes are the result of physiological changes which include change in height, weight and appearance. Sexual changes include production of sex hormone which generates sexual aspiration, stimulation and desire in adolescents. According to Erickson, the psychological crisis that is faced by the adolescents the conflict of his/her identity. He emphasized if the conflict of these stages is sorted efficiently the youth will be successful in life and in case s/he fails to do so, the state of despair, shame, isolation and depression is faced by the individual. There is no mental peace, calm and quiet for the adolescent and no serenity of mind for him. Period of adolescence has been marked by emotional storm and stress. It is a period of heightened emotionally. Adolescents are disturbed due to physical and sexual development. Their feelings are quite intense, these are on the extremes. Emotional moods of adolescents vary from elation to depression. In the words of Ross, "The adolescents lives an intensely emotional life, in which we can see once more the rhythm of positive and negative phases of behaviour in his constant alteration between intense excitement and deep depression". This is why the period is often designated as a period of stresses and strains. An adolescent, sometimes cannot adjust himself to the conditions of home and family. Family adjustment problems arise due to the fact



that his/her needs increase and parents may not be able to meet all those needs. The adolescents begin to behave as an independent individual. He/she begins to assert himself. The parents resist his independence and this leads to trouble. Family, which plays an important role in the personality development of adolescents, should not dominate the adolescents unnecessarily, and should rather treat them as friend. Adolescence is the most important and challenging period of growing up. In this stage one tries to understand the world around him/her and tries to adjust with biological and psychosocial changes taking place inside the body. Generally people consider this change to be biological but it is social as well as psychological also. The multi-dimensional nature of the stage incorporates a gradual transformation of a child into a new person as an adult, whereas society and culture demands some different changes. The adolescent attracts towards the friend circle, peer group moves farther from family and demands independence. Psychosocial changes include formation of new identity, self-concept, and self-regulation; requisite to discover a place in society, and anticipations. All these factors give rise to conflicts among family and society and results in different behavioural problems. Behavioural problems in this stage are a sensitive issue and these should be addressed carefully and appropriately. The problems of adolescents are quite severe as compared to those of children as they continue to be confused and nervous concerning to the biological, psychological and social encounters they have confronted. The challenges include emotional instability and mood swings, carelessness, irritability, depression etc. Generally up to 15 % of individuals under the age of 18 years of age experience above mentioned problems which in turn leads to arguments in the family, withdrawing from family, delinquency, breaking rules, stealing, acts of vandalism and substance abuse. Researchers explored that substance abuse was seen as a major problem and unfolded that “30% to 50% of adolescents scuffle with low self-esteem, especially in early phase of adolescence”. The result of discussions of these problems related to adolescence is that this is the most critical period of individual’s life. In this period equilibrium of physical, mental and social forces is lost and the result is that the individual has to make new adjustments with his own self, with the family and with the society at large.

### Objectives of the Study

1. To access the problems of youth related to family, College, Society and personal aspects.
2. To compare the types of problem faced by the youth.

About the Inventory: ‘Youth Problem Inventory’ discovers numerous holdups experienced by adolescence under

four core areas specifically family problems, college problems, social problems and personal problems. The inventory contains 80 statements which are classified into four sections namely A, B, C & D. Section A contains 31 questions regarding family problems. Section B contains of 20 questions in context of college problems. Section C contains 5 questions concerning classmates reflecting social problems whereas Section D explores the areas of personal problems. The tool was developed by Dr. (Mrs.) Mithlesh Verma in 2012.

The inventory can be used to:

- i. identify among youth with more or less problems.
- ii. identify exact problematic area.
- iii. screen youth for counseling
- iv. empower young people to know their problem.

**Reliability:** As mentioned in the Youth Problem Inventory, “Reliability of the tool has been found through test-retest method, retest was conducted within the time period of 15 days to avoid variations in the results.

The reliability coefficient of YPI is as follows:

Table 1.1 Showing Reliability Coefficients	
Areas	Reliability Coefficient
A	0.85
B	0.86
C	0.76
D	0.81
Entire Inventory	0.80
Range	0.76-0.86

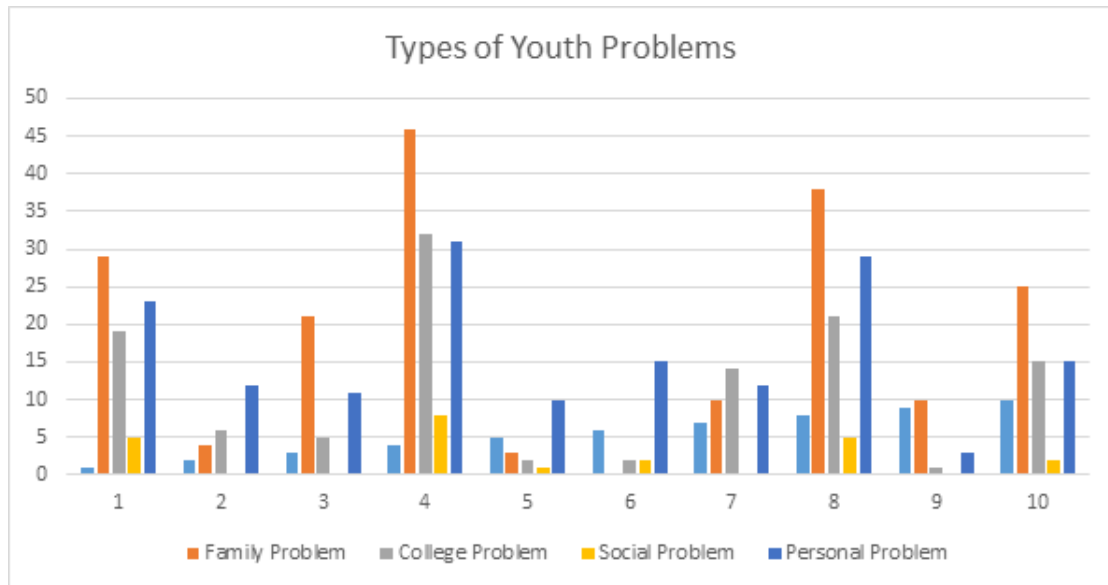
**Validity:** Validity coefficient mentioned in the tool using various tests is as follows:

Table 1.2 Showing Validity Coefficients		
Sr. No.	Test	Validity
1.	Dr. N. Bhagia’s Problem check list	0.75
2.	Prof. H. Asthana’s Adjustment Inventory	0.72
3.	Km. Mehru D. Bengali’s Youth Adjustment Analyser	0.68
4.	Mooney’s Problem check list	0.69
5.	Affirmative answers of the question concerning coverage of problems.	0.87

**Sampling:** The researcher has collected the data from 10 Youth of Amity University for the present study. The students were selected randomly from different courses.

## Data Representation

Table1.3 showing scores of Youth Problem Inventory								
S. No.	Age	Gender	Total Score				Total	Mean
			Family Problem	College Problem	Social Problem	Personal Problem		
1	19	Male	29	19	5	23	76	19
2	18	Female	4	6	0	12	22	5.5
3	17	Female	21	5	0	11	37	9.25
4	18	Female	46	32	8	31	117	29.25
5	18	Female	3	2	1	10	16	4
6	19	Female	0	2	2	15	19	4.75
7	18	Female	10	14	0	12	36	9
8	17	Female	38	21	5	29	93	23.25
9	18	Female	10	1	0	3	14	3.5
10	18	Female	25	15	2	15	57	14.25



**Fig 1.1 Showing areas of Youth Problems**

Interpretation: The figure 1.1 highlights that maximum of youth is facing the family, college and personal problems. The score of family problems is highest in majority of the cases, regarding personal problems nine out of ten youth reported higher score, in context of college problems majority of youth scored high score whereas the score of social problems is lowest.

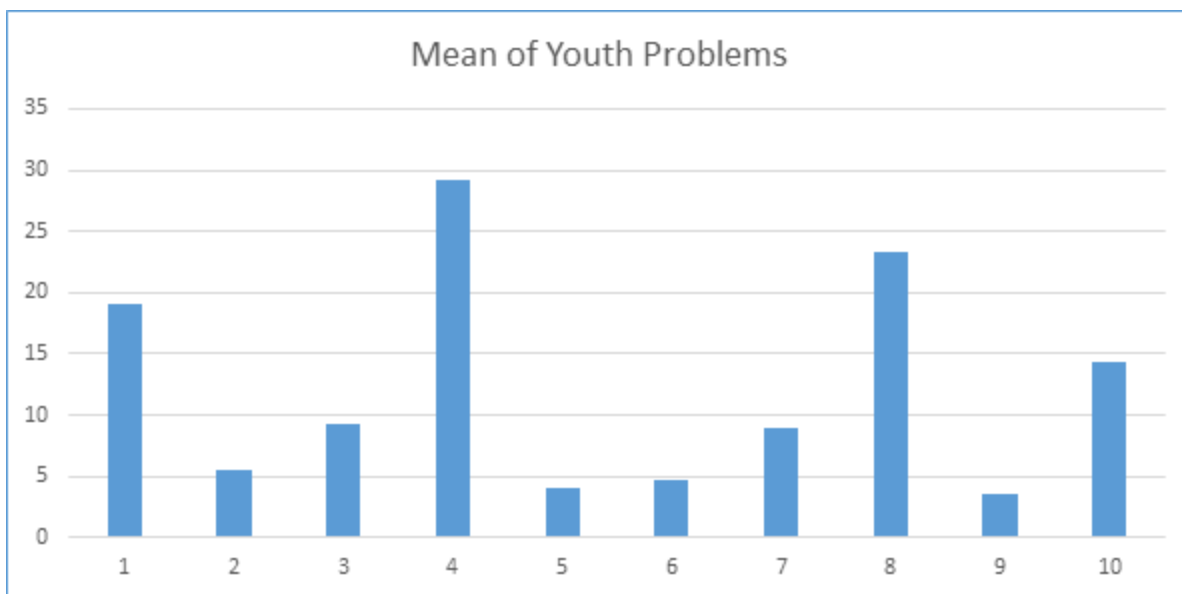


Figure 1.2 Mean of Youth Problems

**Interpretation:** Figure 1.2 highlights that mean of youth problems of three students is less than 5, three students fall in the range of 5-10, mean of one student is in the range of 10-15, one student in the range of 15-20, from 20-25 one student and one in between 25-30.

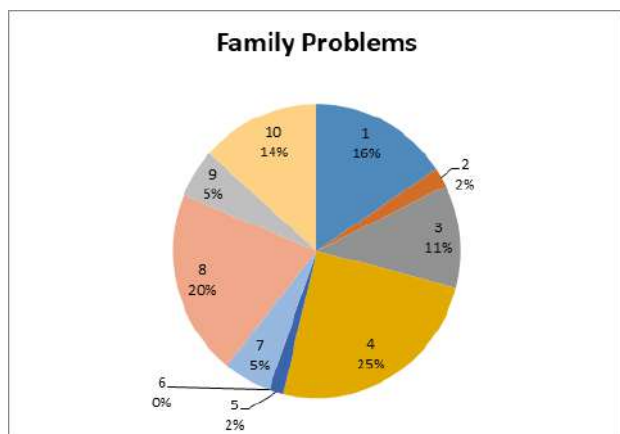


Figure 1.3 Showing Family Problems

**Interpretation:** Score of three students is higher, two students have scored medium and rest of the have low very scores.

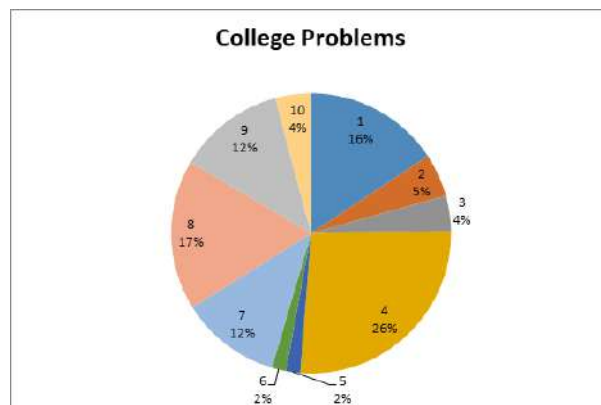


Figure 1.4 Showing College Problems

**Interpretation:** Figure 1.4 highlights college problems only three students scored high whereas rest of them are not facing much problem.

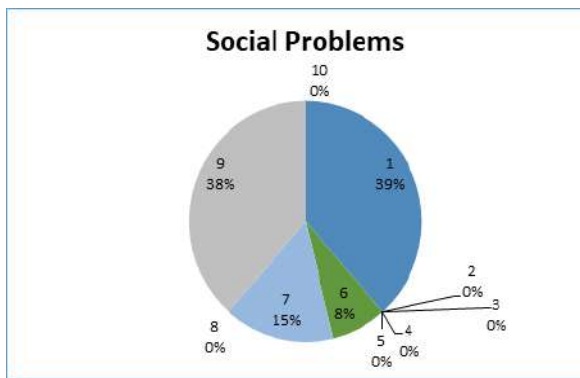


Figure 1.5 Showing Social Problems

**Interpretation:** Figure 1.5 shows that five students scored zero and rest of the students also scored less in this area.

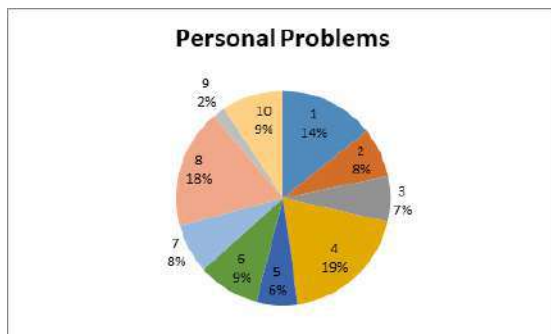


Figure 1.5 Showing Personal Problems

**Interpretation:** Figure 1.5 indicates that almost all the students have problems, three have higher, six have medium level and one has least.

**Discussion:** This inventory is helpful in assessing the problems of youth related to family, college, social and personal aspects.

**Family Problems:** Three students out of ten has higher scores and need intervention, two students have medium score and rest of the have low very scores which depicts that they are not facing much problem and have a good relationship with family members.

**College Problems:** In context of college problems only three students scored high whereas rest of them are not facing much problem. Majority of students reported that they have fear and hesitate to offer suggestions.

**Social Problems:** This is best area of assessment as majority of students are not having problems so no interventions are required.

**Personal Problems:** In case of personal problems three students showed high scoring, six students have medium scoring and one student has the least problem. The problems marked by majority are related to being hurt by others comments, worried about present, unable to impress others and feeling of inferiority.

## Conclusion

The study explored that most of the youth is facing problems in different areas. The areas which have the alarming situation is family and personal, in both the cases the scores are high. Some students are facing the college problems and a very few reported for the social problems. Co-operation of parents must be sought. Parents should co-operate with college staff in helping the adolescents in solving their difficulties. Family atmosphere should be free from any tensions and worries. Guidance facilities should be provided so that adolescents may get suitable educational, vocational and psychological guidance and can have a good quality of life.

## Limitations

1. Due to the paucity of time the study was conducted only on 10 students.
2. The students selected were from different courses of Amity University only.

## Suggestions for Further Studies

The study is highly useful to assess the areas of youth to work upon. Extensive studies can be made on different parameters regarding youth like problems faced by adolescent, their awareness level about the services they can take to solve these problems and awareness about the places or centres from where they can seek guidance. Studies can also be made on the organizations which are providing the facilities of guidance, their hierarchy (Zonal, District and National Level) and bridges between different levels.

# Corporate Social Responsibility: A Strong Tool for Socio Economic Transformation

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## Abstract:

*The paper highlighted various issues concerning Corporate Social Responsibility (CSR). The discussion in the paper revolves around how CSR can become a strong tool for socio - economic transformation apart from other details of CSR activities in India. The paper emerged with many interesting and far reaching conclusions and recommendations. The paper concluded that there is an ample scope of CSR in India. Efforts should be made to bring maximum number of companies in CSR net. Companies should be motivated through some incentives to take number of CSR works. Strict compliance by the companies in CSR policy is highly appreciated as well as Monitoring of CSR projects and utilization of CSR funds should be subject to strict CSR auditing. CSR expenditure should not be source of revenue generation for the company but it should help in generating income for other people. Pilot project on adoption of villages by the companies may be taken up in the beginning before final policy formulation. Ministry of Corporate Affairs, Government of India should give lead role to Indian Institute of Corporate Affairs a think tank of Ministry in CSR policy formulation and implementation in India. No doubt CSR may leads to socio economic transformation as discussed in the paper. In this way CSR will become a strong tool for socio economic transformation.*

**Keywords:** Corporate Social Responsibility Transformation Tool Socio–Economic Policy

## Introduction

When an industry set up and runs, no doubt it creates lot of side effects to the society and environment in the area surrounding the industry. It not only negatively affects the human being but also to flora and fauna of the area due to environmental pollution regardless to positive factors of industrialization. It is the moral duty of the industrialists or the corporators first to minimize these losses and secondly to compensate these losses which are inevitable in whatever best form. Compensation of loss to the society is called Corporate Social Responsibility. Corporate Social Responsibility is the moral obligation of the industries.

Corporate Social Responsibility (CSR) is not a new phenomenon in Indian corporate world. Industries have been doing CSR duties for centuries without any compulsion but as the part of their moral obligation on their own. In olden days there was no CSR concept or CSR rules but there was CSR in one or other form.

In India old industrialists such as Tata, Birla, Dalmia, Modi and many more has done memorable good job for the society to fulfill their moral obligation towards CSR duties. They opened much best quality educational and health institutions, built religious institutions/temples,

provide drinking water facilities, built community centers, performing social and religious functions, rural development works such as rural roads, development of villages etc. are some of the examples of their works as part of their charity or CSR. They were performing these developmental activities continuously on their own out of their profit earned. They got some kind of satisfaction while spending some amount out of earned profit in the charitable work. They have been performing these activities directly or through trust or foundation by their own desire not under any compulsion. As the industries in those days working on the principles of moral ethics, values and culture but over a period of time these moral values has gone down slowly and slowly forgetting their moral obligation to society. And later on a need was felt that to fulfill the obligation towards social responsibility by the industries be made mandatory for industries. Thus, the ministry of Corporate Affairs, Government of India has recently notified the CSR policy rules in the section 135 of Companies Act, 2013, effective from 1<sup>st</sup> April, 2014.

## Conceptual Framework of Corporate Social Responsibility

The term “Corporate Social Responsibility” can be referred

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as corporate initiative to assess and take responsibility for the company's effects on the environment and impact on social welfare. Corporate Social Responsibility may also be referred as "Corporate Citizenship" and can involve incurring short term costs that do not provide an immediate financial benefit to the company, but instead promote positive social and environmental change.

"Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of workforce and their families as well as of the local community and society at large<sup>1</sup>.

International Standard Organization defines CSR as "The responsibility of an organization for the impacts of its decisions and activities on society and environment, resulting in ethical behavior and transparency which contributes to sustainability, including the health and well-being of society; takes into account the expectations of stakeholders; complies with current laws and is consistent with international standards of behavior; and is integrated throughout the organization and implemented in its relations".

According to Howard father of Corporate Social Responsibility "The obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objective and values of our society".

According to the chairman of the CSR committee mentioned the guiding principle as follows:"CSR is the process by which an organization thinks about and evolves its relationships with stakeholders for the common good, and demonstrates its commitment in this regard by adoption of appropriate business processes and strategies. Thus CSR is not charity or mere donations. CSR is a way of conducting business, by which corporate entities visibly contribute to social good. Socially responsible companies do not limit themselves to using resources to engage in activities that increase only their profits. They use CSR to integrate economic, environmental and social objectives with the company's operations and growth".

### Progress of CSR in India

According to the sub section 1 of section 135 of the company's act, 2013, the companies having net worth of INR 500 Crore or more; or turnover of INR 1000 Crore or more; or net profit of INR 5 Crore or more during any financial year shall be reckoned in the ambit of CSR rules. Such companies shall be required to constitute a CSR committee of the board with effect from 1st April, 2014. Details of total active companies as well as CSR reporting companies presented in table 1.

Table: 1 Total Number of Active Companies and total number of CSR Reporting Companies during 2014-15 and 2015-16							
Sl. No.	Year	Private Sector		Public Sector		Total	
		Total Companies	CSR Reporting Companies	Total Companies	CSR Reporting Companies	Total Companies	CSR Reporting Companies
1.	2014-15	1004949	5667	65100	203	1070049	5870
2.	2015-16	1077398	7746	65733	237	1143131	7983

Source: Annual Reports of Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website: [www.mca.gov.in](http://www.mca.gov.in) on dated 23.1.2019

According to the table, during 2014-15, 1070049 total active companies were registered in India, out of which 5870 companies were CSR reporting companies which was only 0.55 percent of total active companies which is a very negligible figure. Out of total active companies 93.91 percent were in private sector and 6.09 percent in public sector. 0.56 percent of CSR reporting companies were from private sector while 0.31 percent companies were in public sector. Likewise during 2015-16, total active companies have increased to 1143131, out of which 94.24

percent were private sector companies. Out of total active companies 0.75 percent was CSR reporting companies. In private sector 0.71 percent companies were CSR reporting companies while in public sector, 0.36 percent CSR reporting companies. Analysis of two years data which is the latest available data indicates that number of CSR companies has been increasing since CSR policy rules effective from 1.4.2014. It is a very good beginning to start with. In future more and more companies will be listed. As per the available latest data from Ministry of Corporate Affairs, Government of India during 2015-16 total 5097 CSR reporting companies spent 9822 Crore rupees on CSR activities. Out of total 7983 CSR companies, 5097 companies (63.84 Percent) provide details about their CSR



activities. Out of 5097 CSR companies, 2406 companies reported zero expenditure on CSR activities (47.18 percent) which is a big number. In real term only 2691 companies i.e.33.71 percent of total 7983 CSR companies, spent amount on CSR activities (Table 1).

**Table: 2 Amount Spent by Companies on CSR in India during 2015-16**

Sl. No.	Range of Amount Spent ( in Rs. Crores)	Number of Companies	Total Amount Spent ( in Rs. Crores)
1	0	2406(47.20)	0
2	0.1-1.0	2111(41.42)	545(5.55)
3	1.1-2.0	180(3.53)	267(2.72)
4	2.1-3.0	74(1.45)	186(1.90)
5	3.1-4.0	79(1.55)	276(2.81)
6	4.1-5.0	46(0.90)	209(2.13)
7	5.1-6.0	23(0.45)	126(1.28)
8	6.1-7.0	19(0.37)	123(1.25)
9	7.1-8.0	11(0.22)	83(0.85)
10	8.1-9.0	14(0.28)	120(1.22)
11	9.1-10.0	17(0.34)	163(1.66)
12	10.1-11.0	9(0.18)	95(0.97)
13	11.1-15.0	22(0.43)	291(2.97)
14	15.1-25.1	25(0.49)	483(4.92)
15	25.1-50.0	21(0.41)	714(7.28)
16	50.1-100.0	20(0.39)	1397(14.23)
17	100.1-200.0	10(0.20)	1529(15.58)
18	200.1-500.0	9(0.18)	2555(26.04)
19	500.1 and above	1(0.02)	652(6.64)
<b>Total</b>		5097(100.00)	9814(100.00)

Note: Figures in parentheses shows percentage to column total

Source: Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website; www.mca.gov.in dated 23.1.2019

Data indicates that out of 5097 CSR reporting companies 2406 (47.20 percent) were not spending any amount on CSR. Only 2691 companies were spending amount on CSR. Out of 2691 companies majority of them i.e. 2111(78.45 percent) were spending a very meager amount ranging from 0.1 -1.0 Crore rupees. These companies spent total amount of rupees 545 Crore which was 5.55 percent of total CSR expenditure in India while remaining 580 CSR reporting companies (21.55 percent) spent 94.45 percent of total CSR expenditure of Rs.9814 Crore in India in 2015-16. 180 companies (3.53 percent) spent Rs.267 crore (2.72 percent) in the range of Rs.1.1-2.0 crore. 74 companies (1.45 Percent) made CSR expenditure

in the range of Rs.2.1-3.0 Crore which was Rs 186 crore (1.90 percent). 79 CSR companies spent 276 Crore rupees on CSR in the range of 3.1-4.0 crore rupees which was 2.81 percent of total CSR amount in India. 46 companies spent CSR amount in the range of 4.1-5.0 Crore rupees which was 2.13 percent of total CSR amount. Likewise 23 companies spent CSR amount in the range of 5.1-6.0 Crore rupees totaling 126 crore rupees. 19 companies spent CSR amount in the range of 6.1-7.0 Crore rupees which was 123 crore rupees (1.25 percent).

Highest CSR amount was spent by one company i.e. Rs.652 Crore (6.64 percent of total CSR amount). Nine companies spent 2555 Crore on CSR activities i.e.26.04 percent of total CSR amount falls in the range of 200.1-500 Crore rupees. Likewise 10 companies spent 1529 Crore rupees (15.58 percent) in the range of 100.1-200 Crore rupees. 20 companies spent CSR amount in the range of 50.1-100 Crore rupees totaling Rs.1397 Crore rupees (14.23 percent). 21 companies spent total 714 crore rupees (7.28 percent) on CSR falls in the range of 25.1-50.0 Crore rupees. Analysis of data revealed that on an average one company spent about two Crore rupees on CSR activities in India. Majority of companies spent less than one Crore in a year. Only a small chunk of companies spent reasonable satisfactory amount on CSR activities. Out of 5097 companies only 400 companies (7.84 percent) spent more than two Crore rupees on CSR activities during the year 2015-16 (Table 2).

Analyses of data further revealed that a very small percentage of companies spent on CSR. Government has to bring maximum number of companies in the ambit of CSR.

### CSR Expenditure on Activities/ Sectors in India

Broad Activities/Sector wise CSR Expenditure has been distributed into 11 activities/sectors as described in Annual report of Ministry of Corporate Affairs, Government of India 2017-18. These Activities/Sectors are such as Health/Eradicating Hunger/Poverty and Malnutrition/Safe Drinking Water/Sanitation, Education/Differently Abled/ Livelihood, Rural Development Projects, Environment/ Animal Welfare/Conservation of Resources, Swachh Bharat Kosh, Prime Minister's Relief Fund, Gender equality/Women empowerment/Old age homes/Reducing inequalities, Encouraging Sports, Heritage, Art and Culture, Slum Area Development and Clean Ganga Fund. Details of CSR expenditure incurred in these activities/ sectors during 2014-15 and 2015-16 has been discussed as under.

During 2014-15, highest CSR Expenditure was made in Education/Differently Abled/Livelihood i.e.31.56 percent (Rs. 3015 Crore) followed by Health/Eradicating Hunger/Poverty and Malnutrition/Safe Drinking i.e.16.40 percent (RS. 2380 Crore) and Any Other Sector/Fund not Specify Anywhere i.e.16.40 Percent (Rs.1566 Crore). Considerable CSR expenditure was utilized in Rural Development Projects i.e.10.79 percent (RS.1031 Crore) and Environment/Animal Welfare/Conservation of Resources i.e.8.50 Percent (RS.812 Crore). A small amount of CSR expenditure was utilized in Gender equality/Women empowerment/Old age homes/Reducing inequalities i.e.1.80 percent (Rs.172 Crore), Swachh Bharat Kosh i.e.0.99 percent (Rs.95 Crore), Encouraging Sports i.e., 0.55 percent (Rs.53 Crore), Heritage, Art and Culture 1.18 Percent (Rs.113 Crore), Slum Area Development i.e.1.06 percent (Rs.101 Crore) and Clean Ganga Fund i.e.0.05 Percent (Rs. 5 Crore). Rs.211 Crore (2.21 Percent) CSR expenditure was donated in Prime Minister's Relief Fund.

Comparison of two years data indicates that 42.61 percent growth rate in CSR expenditure has been recorded which is a remarkable achievement. From the data it is observed that quality of data has also been improving as the CSR expenditure under the head Any Other Sector/Fund not Specify Anywhere was declined. Distribution of total CSR expenditure among different activities/sectors in 2015-16 revealed that highest CSR expenditure was made in Education/Differently Abled/Livelihood which was 34.11 percent (Rs. 4648 Crore) of total CSR expenditure followed by Health/Eradicating Hunger/Poverty and Malnutrition/Safe Drinking Water/Sanitation i.e. 31.52 percent (Rs.4295 Crore) and Rural Development Projects i.e. 9.74 Percent (1327 Crore). A large amount of CSR expenditure was spent in Environment/Animal Welfare/Conservation of Resources i.e. 6.57 percent (Rs.895 Crore), Gender equality/Women empowerment/Old age homes/Reducing inequalities i.e. 2.37 Percent (Rs.323 Crore) and Swachh Bharat Kosh 2.36 Percent (Rs.321 Crore). 1.49 percent (Rs.203 Crore) was donated to Prime Minister's Relief Fund. A very small amount less than one percent of total CSR amount was utilized in Encouraging Sports i.e. 0.98 Percent (Rs.133 Crore), Heritage, Art and Culture i.e. 0.84 Percent (Rs.114 Crore), Clean Ganga Fund i.e. 0.13 Percent (Rs. 18 Crore) and Slum Area Development i.e. 0.08 Percent (Rs.11Crore) (table 3).

**Table: 3 Activity/Sector wise CSR Expenditure during the Year 2014-15 and 2015-16**

Sl. No.	Activities/ Sector	CSR Expenditure (Rs. in Crore)	
		2014-15	2015-16

1	Health/Eradicating Hunger/ Poverty and Malnutrition/ Safe Drinking Water/ Sanitation	2380(24.91)	4295(31.52)
2	Education/Differently Abled/ Livelihood	3015(31.56)	4648(34.11)
3	Rural Development Projects	1031(10.79)	1327(9.74)
4	Environment/Animal Welfare/ Conservation of Resources	812(8.50)	895(6.57)
5	Swachh Bharat Kosh	95(0.99)	321(2.36)
6	Gender equality/ Women empowerment/ Old age homes/Reducing inequalities	172(1.80)	323(2.37)
7.	Prime Minister's Relief Fund	211(2.21)	203(1.49)
8	Encouraging Sports	53(0.55)	133(0.98)
9.	Heritage, Art and Culture	113(1.18)	114(0.84)
10.	Slum Area Development	101(1.06)	11(0.08)
11.	Clean Ganga Fund	5(0.05)	18(0.13)
12.	Any Other Sector/ Fund not Specify Anywhere	1566(16.40)	1337(9.81)
13.	Total	9554(100.00)	13625(100.00)

Note: Figures in parentheses shows percentage to column total

Source: Annual Report, 2017-18, Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website;www.mca.gov.in on dated 23.1.2019

Zone wise analyses of data revealed that during 2014-15 West Zone has highest CSR expenditure among five zones in India constitute 17.94 percent of total CSR expenditure in India followed by South Zone (15.12 Percent) and North Zone (13.21 Percent). East Zone has 5.65 percent expenditure of total expenditure. North East Zone has only 1.61 percent of total CSR expenditure. In 46.47 percent of CSR expenditure, state name was not mentioned during 2014-15. During 2015-16 South zone has highest CSR expenditure among five zones of India constitute 20.96 percent of total India followed by West Zone (17.35 percent) and North Zone (17.33 percent). CSR expenditure of East Zone was 8.94 percent of All India while North East constitutes 1.30 percent of total CSR expenditure in India. Data indicates that 34.12 percent of total CSR expenditure in India did not mention any state which is lower than previous year. It can be concluded that quality of data has improved over the previous year during 2015-16 (Table 4).

**Table: 4 Zone wise CSR Expenditure during 2014-15 and 2015-16 in India (Rs. In Crore)**

Sl. No.	Zone	2014-15	2015-16
1	North	1261.95(13.21)	2361.05(17.33)

2	South	1444.38(15.12)	1218.12(8.94)
3	East	450.17(5.65)	2363.38(17.35)
4	West	1713.76(17.94)	176.59(1.30)
5	North East	153.52(1.61)	176.59(1.30)
6	Not Elsewhere Classified/ Not mentioned/Pan India*	4439.94(46.47)	4649.74(34.12)
7	Total India	9553.72(100.00)	13625.25(100.00)

Note: Figures in parentheses shows percentage to column total

Source: Annual Report, 2017-18, Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website: www.mca.gov.in on dated 23.1.2019

\*Companies either did not specify the names of state or indicated more than one state where projects were undertaken

Note:

1. Figures within parentheses denotes the percentage to total.
2. North zone includes the states/UTs of Chandigarh, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Punjab and Rajasthan.
3. South zone includes the states/UTs of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, Telagana, Pondicherry, and Lakshadweep Islands.
4. East zone includes the states/UTs of Andaman & Nicobar Islands, Bihar, Jharkhand, Odisha and West Bengal.
5. West zone includes the states/UTs of Dadra Nagar Haveli, Daman Diu, Goa, Gujarat and Maharashtra.
6. North East zone includes the states/UTs of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim

**Table: 5 Statement Showing the Top Five CSR Performing States in India in 2014-15 and 2015-16**

Sl. No	2014-15			2015-16		
	Name of the State	CSR Expenditure in Rs. Crore	Percentage of Total India	Name of the State	CSR Expenditure in Rs. Crore	Percentage of Total India
1.	Maharashtra	1369.22	14.33	Maharashtra	1787.35	13.12
2.	Tamilnadu	498.73	5.22	Andhra Pradesh	1195.80	8.78
3.	Andhra Pradesh	403.91	4.23	Karnataka	701.14	5.15
4.	Karnataka	382.61	4.00	Odisha	597.97	4.39
5.	Gujarat	295.35	3.09	Tamilnadu	589.23	4.32

Source: Annual Report, 2017-18, Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website; www.mca.gov.in on dated 23.1.2019

State wise analyses of data indicate that Maharashtra state in India has got first position in CSR expenditure. During 2014-15 state share in all India CSR expenditure was 14.33 percent i.e. 1369 .22 Crore. Though it has increased to Rs.1787.35 Crore in 2015-16 but all India share has decreased (13.12 percent). Tamilnadu got second position in 2014-15 having 5.22 percent all India share. During 2015-16 Tamilnadu state reached in fifth position as its share in all India decreased to 4.32 percent. Andhra Pradesh achieved third position in 2014-15 with 4.23 percent in all India share. Andhra Pradesh improved its position and reached at second position with 8.78 percent share in all India. During 2014-15 Karnataka was in fourth position in India having 4.00 percent share. During 2015-16 Karnataka also improved its position and reached at third position having 5.15 percent share in All India. Gujarat state share was 3.09 percent stood at fifth position in India in 2014-15 while Gujarat could not maintained

its position in 2015-16 and slipped at lower place. During 2014-15 Odisha was not among top five states in India but surprisingly during 2015-16 the state achieved fourth position in India having 4.39 percent share (Table 5).

**Table: 6 Statement showing the top Twenty CSR Companies spending more than one hundred Crore Rupees each on CSR Activities in India during 2015-16**

Sl. No.	Title of the Company	Amount Spent on CSR in Crore Rupees	Percent of total CSR Amount
1	Reliance Industries Ltd.	652.0	6.64
2	NTPC Limited	491.8	5.01
3	Oil & Natural Gas Corporation Limited	421.0	4.29
4	TCS Limited	294.0	3.00
5	South Eastern Coalfields Limited	270.9	2.76

6	ITC Limited	247.5	2.52
7	Central Coalfields Ltd.	212.8	2.17
8	NMDC Limited	210.1	2.14
9	Tata Steel Limited	204.5	2.08
10	Infosys Limited	202.3	2.06
11	Power Finance Corporation Limited	195.5	1.99
12	HDFC Bank Limited	194.8	1.98
13	ICICI Bank Limited	171.5	1.75
14	GAIL (India) Limited	160.6	1.64
15	Wipro Limited	159.8	1.63
16	Indian Oil Corporation Limited	156.7	1.60
17	Axix Bank Limited	137.4	1.40
18	Rural Electrification Corporation Limited	128.2	1.31
19	Bharat Petroleum Corporation Limited	112.6	1.15
20	Larsen & Tubro Limited	111.9	1.14

Source: Ministry of Corporate Affairs, Government of India, New Delhi, retrieved from the Website: [www.mca.gov.in](http://www.mca.gov.in) on dated 23.1.2019.

During 2015-16 among twenty CSR companies in India, ten equal numbers of companies are in each public and private sector. Public sector companies are such as: NTPC Limited, Oil and Natural Gas Corporation Limited, South Eastern Coalfields Limited, Central Coalfields Limited, NMDC Limited, Power Finance Corporation Limited, GAIL (India) Limited, Indian Oil Corporation Limited, Rural Electrification Corporation Limited and Bharat Petroleum Corporation Limited. Likewise, private sector companies are such as: Reliance Industries Limited, Tata Consultancy Services Limited, ITC Limited, Tata Steel Limited, Infosys Limited, HDFC Bank Limited, ICICI Bank Limited, Wipro Limited, Axis Bank Limited and Larsen & Tubro Limited. Share of private sector companies in total CSR expenditure in India is Rs. 2375.7 Crore which is 24.20 percent of total CSR amount in India while share of private sector companies is Rs.2360.2 Crore which is 24.04 percent. It can be concluded from the analyses of data that 48.24 percent of total CSR expenditure in India is from the top twenty companies. 51.76 percent of CSR amount in India is Other than top twenty companies.

Analyses of data further revealed that during 2015-16 among top twenty CSR companies, Reliance Industries Limited stood first in all India CSR ranking. Reliance Industries Limited alone spent 652 Crore rupees on CSR activities which is 6.64 percent of total CSR expenditure in India. NTPC Limited spent 491.8 Crore rupees on CSR

activities which is 5.01 percent of total CSR expenditure in India, stood second position in India in CSR ranking. Oil and Natural Gas Corporation Limited ranked IIIrd position in all India CSR ranking spent 421.0 Crore rupees which is 4.29 percent of total CSR expenditure in India. Among top twenty companies Larsen & Tubro Limited is at lowest position spent 111.9 Crore rupees which is 1.14 percent of total CSR amount in India. Rural Electrification Corporation Limited and Bharat Petroleum Corporation Limited next higher position spent 128.2 Crore rupees and 112.6 Crore rupees respectively during 2015-16 which is 1.31 percent and 1.15 percent respectively of total CSR amount in India (Table 6).

### Diagnostic Analyses of CSR Data

By going through the available data and literature the following analyses has been emerged.

1. Earlier CSR obligations were fulfilled by the industries by their own soul not by any compulsion but now it has become mandatory under new CSR policy.
2. There was no intensive and meaningful data available prior to the implementation of CSR policy. But after the implementation of new CSR policy 2014 in India, government start collecting, tabulating and publishing the CSR data at state as well as national level. Individual Company wise data is also available on Ministry of Corporate Affairs website. Data presented by Ministry of Corporate Affairs do not match with one another. Company wise data do not match with activity wise data.
3. Analyses of data indicate that very less number of companies shown their CSR expenditure or activities. Not even one percent of the active companies shown their CSR contribution both in private as well as public sector companies. This is a very state of pathetic condition or sorrow state affairs in respect to CSR (Table 2).
4. Company wise analyses of data revealed even grimmer picture. Only 5097 active companies throughout India showed their CSR details during 2015-16. Out of them, 2406 CSR reporting companies did not spent any amount on CSR which itself a big number which is 47.20 percent of total CSR reporting companies. Furthermore 2111 CSR companies (41.42 percent) spent CSR amount in the range of 0.1-1.0 Crore rupees. It shows the very poor participation of companies towards CSR (Table 2).
5. Whole CSR activities/sectors have been divided into



eleven activities/sectors. These are broad indicative activities not detailed one. For in-depth analytical studies data in the present form is not sufficient (Table 3).

6. State/Zone wise data indicates that in 46.47 percent CSR expenditure in 2014-15 and 34.12 percent CSR expenditure data in 2015-16 did not mention any state or mention the location of the CSR project. It shows the poor quality of information provided by the companies in their returns submitted to the government. Though the situation has improved a little in 2015-16 over the year 2014-15 (Table 4).
7. Among states, Maharashtra is on the top of all states in India in CSR expenditure in both 2014-15 and 2015-16 years. The difference between Maharashtra and Tamilnadu state (Second Position) is very large during 2014-15. Likewise difference in CSR expenditure between Maharashtra and Andhra Pradesh (Second Position) is also large. It indicates that industries of Maharashtra state are very generous towards CSR obligations (Table 5).
8. Individual company wise data highlighted that top twenty CSR companies spent 48.26 percent of total CSR expenditure in India during 2015-16. It indicates that only few companies in India are serious about CSR activities (Table 6).

### Way Forward how CSR help in Socio-Economic transformation

No doubt CSR involve huge fund. Utilization of CSR fund in a proper and systematic manner can leads to Socio-Economic transformation in rural and urban areas both. But it can have more impact in rural area where such type of investment is highly required. Companies spend CSR amount on such activities which enhance the socio economic level of the human being living in the area of CSR project. Companies should invest the CSR fund in such a manner which has direct impact on the life of the people of the CSR project area. Effects of CSR project should be visible and known to the people of the area. It should directly affect the living of people in terms of livelihood and improving the standard of living of people.

More than ten lakhs active companies are functioning in India and number of villages in India is not more than seven lakhs. On an average one company can easily adopt one village for the overall socio economic development of village. Industries should be given responsibility to develop all villages under their CSR policy. Industries in consultation with local elected Panchayat officials should

identified the key areas of development according to the need of village and formulate the CSR policy. According to the identified works and available fund under CSR in the particular year, works can be taken up on priority basis. Selection of villages for adoption should be based on the criterion of size of company and village both. Location of the company should also be taken care of while allocating the village for adoption. In this noble cause even the educational, health and other state and central government institutions should be involved. Small size companies should allot small village and vice versa for adoption of village. With the help of sociologists, economists and other professionals, CSR policy of individual company and village may be formulated and implemented. Companies should make their CSR policy in view of their fund position and needs of the village. Since CSR is a continuing programme thus CSR works should be taken up on priority basis on annual basis. After few years we will find that most of the needs of villagers have been fulfilled and village transform into a model village. It will really lead to socio economic transformation of villages. Major areas/sectors where investment is required in rural area are health, education, livelihood and employment, sanitation and safe drinking water, energy and infrastructure. Ministry of Corporate Affairs, Government of India should take the lead in this matter. If needed, rules may be amended as per the requirement. Ministry should appoint a nodal agency for policy formulation and implementation of plan. Expertise of Indian Institute of Corporate Affairs, Manesar, Gurugram may be utilized as nodal agency for policy formulation and implementation of CSR policy. So in this manner CSR may become a strong tool for socio economic transformation.

### Conclusions and Recommendations

Based on analyses of data and literature review the following conclusions and recommendations have been emerged:

- There is an ample scope of CSR in India.
- No doubt CSR may leads to socio economic transformation as discussed in the paper.
- Companies should be motivated through some incentives to take number of CSR works.
- Efforts should be made to bring maximum number of companies in CSR net.
- Strict compliance by the companies in CSR policy is highly appreciated.



- Monitoring of CSR projects and utilization of CSR funds should be subject to strict CSR auditing.
- CSR expenditure should not be source of revenue generation for the company but it should help in generating income for other people.
- Pilot project on adoption of villages by the companies may be taken up in the beginning before final policy formulation.
- Ministry of Corporate Affairs, Government of India should give lead role to Indian Institute of Corporate Affairs a think tank of Ministry in CSR policy formulation and implementation in India.
- In this way CSR will become a strong tool for socio economic transformation.

## References

- Definitions of Corporate Social Responsibility – What is CSR? Retrieved from the website: [mallenbaker.net/article/clear.../definitions-of-corporate-social-responsibility-what-is-csr](http://mallenbaker.net/article/clear.../definitions-of-corporate-social-responsibility-what-is-csr), accessed on dated 24.1.2019.
- Definitions: CSR (Corporate Social Responsibility) – e – CSR.net retrieved from the website: <http://e-csr.net/definitions/csr-definition> accessed on dated 24.1.2019.
- Hamidu Ahmad Amini and haron Md.Harshid and Aman Azlan, Corporate Social Responsibility: A Review on Definitions. Core Characteristics and Theoretical Perspectives, Mediterranean journal of Social Science-2015, Vol.6 (4), retrieved from the website: <http://mrpa.cb.line-muenchen.do/75040/1/MPLA-PAPER-75040PDF> assessed on dated 24.1.2019.
- Corporate Social Responsibility (CSR) Policy, retrieved from the Website: [finance.bih.nic.in/documents/csr-policy.pdf](http://finance.bih.nic.in/documents/csr-policy.pdf) on dated 19.2.2019
- Corporate Social Responsibility (CSR) Policy, retrieved from the Website: [finance.bih.nic.in/documents/csr-policy.pdf](http://finance.bih.nic.in/documents/csr-policy.pdf) on dated 19.2.2019

# An Empirical Study on the Impact of Basel III norms on the Profitability: An anecdote on Indian public sector banks

Dr. Namita Rajput\* Ms. Sruthi Sankaran\*\*

## Abstract

*The banking sector plays an intermediary role in the financial market and hold a unique locus towards creating a utopian economy. A poor financial performance in an economy creates a distress in the economic stability leading to an economic crisis. The crash of 2008 Global Financial crisis entails the need for constant surveillance and prudent policies to refine the banking industry. The international regulatory accord implemented the Basel III norms for a sound and healthy banking system. The first version was published by the Basel committee in the late 2009 and are said to be more effective in management by creating a bridge between profitability and solvency. It seeks to improvise the financial risk management with a more transparent system and uses credit ratings to establish risk coefficients. With the upsurge in the deteriorating asset quality and the financial health of banking institutions, lack of adequate fund and pressure of capital regulation makes the implementation in the Indian banking sector a challenge.*

*In this study, we will examine the impact of Basel III norms on the Indian public sector banks using the analysis of two profitability indicators, that is, Return On Equity(ROE) and Return On Assets(ROA) across 21 public sector banks for 11 years from 2007-2018. The paper concludes by stating that the profitability of public sector banks in India have deteriorated after the implementation of Basel III norms. The study is useful for bankers, policy makers and scholars to carry the research projects.*

**Keywords:** *Basel III reforms, Profitability, public sector banks*

## Introduction

The Indian Financial Market undergoes dynamic challenges with new regulatory reforms. The resilience of a banking system is determined by the efficiency, strong liquidity and the avenue for profitability. These factors will enable a bank to deal with any subtleties of the financial market giving rise to a sound banking system that forms an important locus for the economy. The Indian public sector banks play a major role as fifty percent of the stake is held by the government. The Global Financial crisis and then number of financial frauds on the upsurge has pushed the Indian banking system to follow the international norms for a stable financial sector. Higher profit and sound banking system are two crucial factors to deal with any unexpected turn of events.

In 1974, the governors of the central bank of the Group of Ten countries (G-10) established Basel Committee on Banking Supervision (BCBS). The committee formulates guidelines and recommends best practices for the banking

sector. It has implemented three Basel regulation still date. After the boom of global financial crisis in 2008, the banking sector failed to implement and manage strong liquidity and leverage ratios, which was accompanied by poor risk management and excess credit growth. Basel III is an international regulatory accord which was implemented to strengthen the banks with improved risk management and transparency. The first version was published in the late 2009 and released the final accord in September 2010. Basel III has set its objectives to defend the worst dynamic crisis to ensure that the banking system does have a huge impact on the economy. In response to the credit crisis, banks have to meet the minimum capital requirements and maintain the defined leverage ratios. It is built over the three pillars of Basel II which are: Minimum Capital Requirement, Supervisory process and Market discipline. According to the Reserve bank of India, the Basel III accord was implemented in April 2013 in phases, it will be fully adopted from March 31<sup>st</sup> 2019.

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The banks in India will face a lot of challenges to survive in such a regulatory environment due to the pressure of implementation of new capital regulations to all tiers of Indian banking system, fall in profitability due to high CAR (Capital Adequacy Ratio), cost of implementation, up gradation of technology, validating the credit models and new lending policies to balance the profits. The stringent policies may lead to high borrowing cost or bankruptcy, the chances are quite high due to the current poor performance of public sector banks, rising NPA, falling asset quality and Declining profitability.

The present study focuses on the analysis of the financial performance using the profitability ratios and the impact on profitability after the implementation of Basel III norms.

## Literature Review

The section provides a comprehensive review of the paper work contributing a luminous work towards the study of profitability and performance of banks in the Indian and Global Context. Alper and Anbar (2011) talked about the determinants of bank's profitability in Turkey for the time period of 2002-2010. The paper talks about the positive and negative impacts on the bank profitability. The size of assets and interest rates had a positive impact on the profitability of banks whereas the size of loan had a negative impact.

Roman and Danuletiu (2013) studied the factors affecting profitability in Romania from 2003-2011. The study reveals that the bank specific variables and external factors affect the profitability, like the assets quality, liquidity and management in the banks have a significant impact.

Islam (2014) examined the financial performance of National Bank Limited Bangladesh for the period 2008-2013 and divided the study into two sub-periods ranging from 2008-2010 and 2011-2013. The study concluded that management and proper implementation of strategies could improve the profitability of banks.

Menicucci and Paolucci (2016) studied the relationship between bank specific factors and profitability from 2006-2015 for 28 European banks. The study revealed that the CAR ratio, higher deposit ratio and the bank size are positively related to the profitability.

Mehta and Bhavani (2017) studied the impact of variables in profitability in 19 banks of UAE from 2006-2013. The results declare that Car and improved asset quality has a huge impact on profitability of banks. The authors recommended a profitability enhancing model for better performance in banks.

Islam and Hasan (2017) studied the performance and determinants of profitability for commercial banks in Kosovo. They used ROAE (return on Average Equity), ROAA (Return on Average Assets and NIM (Net Interest Margin). It concluded that the internal factors like the asset quality, Capital adequacy and Management Efficiency affect the profitability.

Maiti and Jana (2017) investigated the determinants of profitability of private sector banks in Bangladesh from 2005-15. The study focused

Kumar and Kavita (2017) state that financially strong banks can cope up with the new international regulations while weaker banks will pose to face challenges for maintaining the capital requirements. The study concluded that a sound banking system is a major concern for shareholders and bankers else might end up with bankruptcy.

Mohamed and Soliman (2017) studied the impact of Basel III reforms for Egyptian banks. It has been found that there is a negative impact on smaller banks or financially weak banks and find it difficult to maintain their pace with lack of funds.

Makkar and Hardeep (2018) measured the profitability of banks and identified the factors that influence the profitability of 46 Indian commercial banks from 2001-2016. The study used various indicators like ROA, liquid assets to total assets, CAR and Non-performing assets to total assets for profitability of banks.

The above findings reveal that private sector banks are performing better than public sector banks in India. The internal and external factors influencing the profitability and performance are same for all the banks. The current study will give the financial performance of public sector banks from 2007-2018 and the impact of Basel III reforms on profitability in two sub-time periods from 2007-13 and 2013-18.

## Data and Methodology

The study uses secondary data taken from annual reports of banks and the website of Money control for the evaluation of profitability across the public sector banks from 2007 to 2018. We will evaluate the profitability by using two indicators: Return on Assets (ROA) and Return on Equity (ROE). In order to analyze the impact of Basel III norms over the profitability, we will use descriptive statistics and analytical approaches using MS excel. Further, the study uses F-test and ANOVA to find the statistical significance for the hypothesis to check the presence of significant difference among public sector banks before and after the implementation of Basel III norms.

## Conceptual Framework

The study uses two profitability indicators to measure the profitability across the public sector banks:

- ROA (Return on Assets) shows the percentage of Profit generated from invested capital relative to its total assets. It depicts the efficiency of bank in managing the assets and generate earning. ROA more than 5 % is termed to be good. The total assets is the sum of liabilities and equities.

The formula for the ROA is as follows:

$$\text{ROA} = [\text{Profit after tax (or net income)} / \text{Total assets}] * 100$$

ROA is used as a comparative term which is measures across banks or industries. It displays the management in generating income with efficiency. Higher ROA means high profitability and better utilization of assets. A low ROA depicts that the investment is high and requires more funds to continue the operations.

- ROE (Return on Equity) is the ratio of net profit to total equity. Equity is assets minus the Debt. The ratio depicts the return on the investment. It measures how efficiently the banks manage to create profits and exhibits the financial health of banks. ROE above 10 to 20 percent is termed as profitable and good.

The formula for ROE is as follow:

$$\text{ROE} = \text{Profits after tax (or net income)} / \text{Total equity}$$

## Results and Discussion

We will study the performance of public sector banks using the profitability indicators followed by the impact of Basel III reforms on profitability.

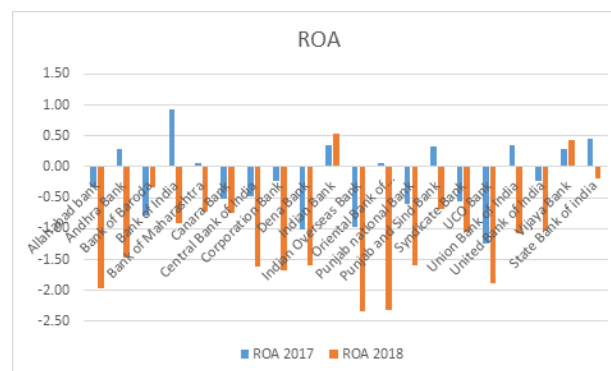
Table 1 and 2 shows the compiled data for ROA of public sector banks for last three years across 21 public sector banks.

Table 1: Current status of ROA and ROE of Public sector Banks				
Public Sector Banks	ROA 2017	ROA 2018	ROE 2017	ROE 2018
Allahabad bank	-0.33	-1.96	-5.57	-38.06
Andhra Bank	0.28	-1.46	5.13	-30.06
Bank of Baroda	-0.78	-0.34	-13.48	-5.81

Bank of India	0.94	-0.91	-19.50	-18.23
Bank of Maharashtra	0.07	-0.73	1.19	-13.23
Canara Bank	-0.52	-0.75	-8.86	-12.19
Central Bank of India	-0.48	-1.61	-8.07	-28.96
Corporation Bank	-0.23	-1.67	-4.64	-34.42
Dena Bank	-1.02	-1.59	-12.83	-22.78
Indian Bank	0.36	0.53	4.54	7.07
Indian Overseas Bank	-0.97	-2.33	-18.51	-46.63
Oriental Bank of Commerce	0.07	-2.31	1.09	-45.33
Punjab national Bank	-0.61	-1.6	-10.27	-29.54
Punjab and Sind Bank	0.34	-0.69	5.81	-22.13
Syndicate Bank	-0.56	-1.05	-12.94	-22.13
UCO Bank	-1.25	-1.88	-22.33	-32.02
Union Bank of India	0.35	-1.07	6.34	-21.39
United Bank of India	-0.22	-1.04	-4.83	-18.19
Vijaya Bank	0.28	0.44	5.54	7.74
State Bank of India	0.46	-0.19	7.30	-3.21

Source: RBI Database

Figure 1: ROA of Public Sector Banks in 2017 and 2018.



Source: Author

### Observation

From the above graph, we can observe a dip in ROA from 2017-18 at varying altitudes, except Indian Bank and Vijaya Bank. A negative Return on Assets means that the banks are losing more money than it generates.

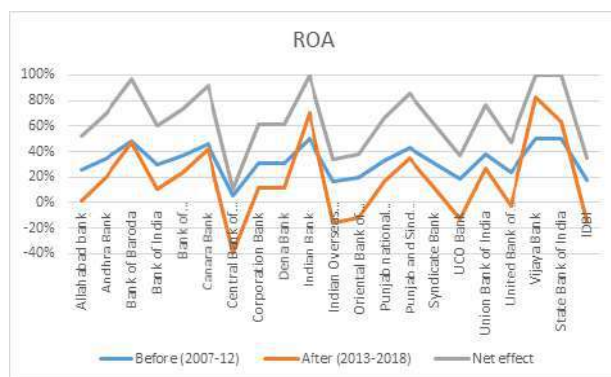
Figure 2: ROE of Public Sector Banks in 2017 and 2018.





**Table 3: ROA before and after Implementation of Basel III reforms**

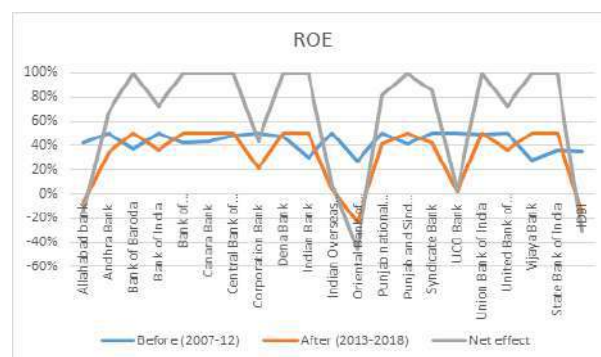
Public Sector Banks	Before (2007-12)	After (2013-2018)	Net effect
Allahabad bank	0.89	-0.83	1.72
Andhra Bank	1.21	-0.5	1.71
Bank of Baroda	1.01	-0.03	1.04
Bank of India	0.94	-0.625	1.565
Bank of Maharashtra	0.61	-0.215	0.825
Canara Bank	1.02	-0.085	1.105
Central Bank of India	0.49	-4.06	4.55
Corporation Bank	1.23	-0.765	1.995
Dena Bank	1.02	-0.645	1.665
Indian Bank	1.43	0.59	0.84
Indian Overseas Bank	0.74	-1.46	2.2
Oriental Bank of Commerce	0.71	-1.14	1.85
Punjab national Bank	1.25	-0.625	1.875
Punjab and Sind Bank	1.04	-0.18	1.22
Syndicate Bank	0.5	-0.31	0.81
UCO Bank	0.62	-1.07	1.69
Union Bank of India	1.03	-0.31	1.34
United Bank of India	0.49	-0.55	1.04
Vijaya Bank	0.61	0.4	0.21
State Bank of India	0.86	0.225	0.635
IDBI	0.54	-1.02	1.56

**Figure 4: ROA of Public Sector Banks in Two phases****Observation**

It has been observed that there is a rapid fall in ROA and ROE after the implementation of Basel III capital norms. Therefore, it had a negative impact on the profitability of Indian Public sector banks.

**Table 4: ROE before and after Implementation of Basel III reforms**

Public Sector Banks	Before (2007-12)	After (2013-2018)	Net effect
Allahabad bank	18.18	-21.215	-3.035
Andhra Bank	19.24	-6.15	13.09
Bank of Baroda	19.21	6.805	26.015
Bank of India	17.31	-4.735	12.575
Bank of Maharashtra	17.32	2.9	20.22
Canara Bank	20.32	2.905	23.225
Central Bank of India	16.97	0.68	17.65
Corporation Bank	18.65	-10.58	8.07
Dena Bank	23.14	1.125	24.265
Indian Bank	21.98	14.49	36.47
Indian Overseas Bank	16.67	-15.39	1.28
Oriental Bank of Commerce	12.10	-22.225	-10.125
Punjab national Bank	22.01	-3.945	18.065
Punjab and Sind Bank	21.34	4.655	25.995
Syndicate Bank	18.67	-2.695	15.975
UCO Bank	20.24	-19.56	0.68
Union Bank of India	21.23	0.165	21.395
United Bank of India	12.12	-3.365	8.755
Vijaya Bank	14.7	11.045	25.745
State Bank of India	14.27	5.45	19.72
IDBI	13.18	-18.905	-5.725

**Figure 5: ROE of Public Sector Banks in Two Phases****Observation**

It has been observed that there is a rapid fall in ROA and ROE after the implementation of Basel III capital norms. Therefore, it had a negative impact on the profitability of Indian Public sector banks.

## Hypothesis Testing

Hypothesis Testing is carried out to declare the assumption for the theory as true or false, by using the statistical inference using the given data. We will begin by stating the Null hypothesis and alternative hypothesis, followed by the statistical test and conclusion.

### Null Hypothesis

H<sub>0</sub>: There is no significant difference present among the two sub-time periods.

Alternate Hypothesis:

H<sub>1</sub>: There is significant difference present among the two sub-time periods.

We will use the F test to test the hypothesis. The following table depicts the Output of ANOVA for ROA.

Table 5: Output of ANOVA for ROA						
Group	SS	DF	MS	F	p-value	F critical
Between groups	3.916	2	3.916	56.76	0.01	4.081
Within groups	2.652	39	0.067			
TT	6568	41				

Table 6: Output of ANOVA for ROE						
Group	SS	DF	MS	F	p-value	F critical
Between groups	2097.3	2	2097.3	109.2	0.02	4.081
Within groups	2.652	39	0.067			
TT	6568	41				

### Implication

From both the above table we can observe that the computed F-value is larger than the critical value, hence rejects the Null Hypothesis. Hence, there is significant difference in ROA and ROE of public sector banks after the implementation of Basel III norms.

### Conclusion

India has progressed to be termed be one of the fastest growing economy in the global platform. The progress towards an innovative and sustainable economy still lies behind when compared to the international stature. Initially, the Basel norms will hinder the progress of profitability of banks and cause financial stress for the Indian Banking system. In accordance with the findings form 2007-2018, the Indian Public sector banks have shown deteriorated financial performance with low ROE and ROA. Therefore, the implementation of Basel III reforms has plunged the

profitability of banks. The adoption of all the components of Basel III reforms from March 2019 could lead to a cumbersome situation in public sector banks and banks which are financially weak, sue to requirement for additional funding burden. If the ROA or ROE is lower than the average values then it is considered to be financially weak. The statistical and empirical study concluded that there is a significant level of difference present among the two sub-time periods for implementation of Basle III reforms. Hence, the Basel III norms and profitability of banks share a negative relationship.

### Limitation of the Study

- The available data is limited to Indian Public sector banks only.
- The study excludes the other factors that might affect the profitability of banks like Asset quality.
- The study is limited to 11 years of analysis from 2007-2018.

### References

- Islam Ariful and Hasan Rana Rezwanul (2017). Determinants of bank Profitability for the selected Private Commercial banks in Bangladesh: A Panel data Analysis. Banks and Bank Systems, Vol 12, No.3, pp.179-192.
- Islam M A. (2014). An Analysis of the Financial Performance of National Bank Limited using Financial Ratios, Journal of Behavioral Economics, Finance, Entrepreneurship, Accounting and Transport, Vol 2, No.5, pp121-129.
- Kumar Krishnan and Kavita (2017). An Analysis of the Financial Performance of Indian Commercial Banks. The IUP Journal of Bank Management, Vol XVII, No1, pp 1-20.
- Maiti A and Jana S K (2017). Determinants of profitability of Banks in India: A Panel Data Analysis. Scholars Journal of Economics, Business and Management, Vol4, No.7, pp436-445.
- Makkar and Hardeep (2018). Key Factors Influencing Profitability of Indian Commercial Banks. International Journal of academic Research and Development, Vol 3, No.1, pp 373-378.
- Mehta A and Bhavani G (2017). What Determines banks' Profitability? Evidence from emerging

Markets: The case of the UAE Banking Sector. Accounting and Finance research. Vol6, No.1, pp77-88.

- Menicucci E and PaolucciG (2016). Factors Affecting Bank Profitability in Europe: An empirical Investigation. African Journal of Business Management. Vol 10, No.17,pp 410-420.
- Mohamed Zaky A H and Soliman M (2017). The Impact of Announcement of Basel III on the Banking System Performance: An empirical Research on Egyptian Banking Sector. The business and management review, Vol 9, No.2, pp.165-175.
- Roman A and Danuletiu a E. (2013). An Empirical Analysis of the Determinants of Bank Profitability in Romania. Annales Universities Apulensis Series Oeconomica. Vol 15, No.2, pp 580-593.

## To Study the Effect of Pressure on staff in Public and Private sector Banks (with special reference to Haridwar city)

Prof. (Dr.) D.C. Agrawal\* Ms. Deepti Garg\*\*

### Abstract

*Psychological problems are the biggest problems of human beings. They give rise to many stress related problems and it has been found that among bank employees the level of stress is very high. Banking Industry today is amongst the top 10 most stressful industries, as per ASSOCHAM. With the increased competition and increased level of de-regulation, banking sector in India has gone with incredible changes which lead to massive pressure and stress in the bank employees. The productivity of the work force determines the success of the organization. All the banks provide almost same products and services to their customers but, the bank management adds more responsibilities on the shoulders of employees, which results in pressure on them, with increasing psychological problems i.e. stress, strain, anxiety, depression, sleep disorders, etc. The purpose of this study is to identify the factors developing stress among the employees working in public and private sector banks and to suggest way to eliminate or to reduce stress.*

*In this context the researcher has undertaken a study to find out the factors affecting the stress level among the bank employees and its effect on public and private sector bank employees.*

**Keywords:** *Psychological problems, ASSOCHAM, pressure and stress, productivity, strain, anxiety, depression, sleep disorders, public and private sector banks.*

### Introduction

Bank is a financial institution that is licensed to deal with money and its substitutes by accepting demand and time deposits, investing in securities and making loans. The bank generates profits from the difference in the interest rates charged and paid.

According to oxford dictionary bank is “an establishment for custody of money which it pays out on customer’s order.”

**Banking:** Section 5 (b) of Banking Regulation Act 1949 defines “BANKING” as “Accepting for the purpose of lending and investment, deposits of money from the public repayable at demand or otherwise and withdraw able by cheque, draft order or otherwise”

**Public Sector Banks** are banks where a majority stake (i.e. more than 50%) is held by a government. The private sector banks represent part of the Indian banking sector that is made up of both private and public bank. Banking in India has been dominated by public sector banks (since the 1969) when all major banks were nationalized by the Indian government. The shares of these banks are listed on stock exchanges. There is a total of 27 PSBs in India.

**Private Sector Banks** in India represent part of the Indian banking sector that is made up of private and public sector banks. The "private-sector banks" are banks where greater parts of share or equity are not held by the government but by private share holders.

### Stress:

According to Selye (1936) stress is “a dynamic activity wherein an individual is confronted with an opportunity, demand or constraint”. Robbins (2003) states that an opportunity, threat, demands, challenge or constraint can create stress for an individual when event’s effect is uncertain and important. According to Robbins & Judge (2007) Factors relating to the organization, the environment, and the individual can also generate stress.

Steers [1981] indicate that, “Occupational stress has become an important topic for study of organizational behaviour for several reasons.”

1. Stress has harmful psychological effects on employees,
2. Stress experienced by one employee can affect the safety of other employees,

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3. Stress is a major cause of employee absenteeism and turnover,
4. Individual and organization can be managed more effectively by controlling dysfunctional stress.

In 1991 & again in 1997, under the chairmanship of M. Narasimham, a set of reforms were introduced to liberalise the Indian Economy. The objective of this liberalisation process is to develop a competitive, diversified and efficient financial system. More than that it also included recommendations on entry of Private and Foreign banks in India, Introduction of Voluntary retirement schemes (VRS) for surplus staff, Computerization, Reduction of government shareholding in government owned banks etc. The banking sector had undergone rapid changes during the past few decades like changes in policy due to globalisation and liberalisation, downsizing, increased competition due to entrance of more private sector banks, introduction of new technologies, etc. A high level of stress is experienced by the banks employees due to these changes. Proof from existing literature states that over 60% of the bank employees have one or other problem directly or indirectly related to these drastic changes. Above discussed factors are potential attributes to cause stress and related disorders (like strain, anxiety, pressure, depression etc) among the employees. Also, Non-banking financial institutions have put pressure on the Public Sector Banks to change the ways in which they do business. Now the days, stress is considered as an important factor, due to which rate of absenteeism among the employers and employees is increasing very rapidly. This is seen more in the public sector, where 50 percent of employers reported stress related absence. Also, job security is considered more common cause of stress in public sector in recent years. In public sector cost on absence reported due to stress is 800 pound per employee a year, as compared to private sector, it is reported 446 pound per employee per year (Miller & Phipps, 2011). Job stress affects not only the employees' but also the organizations in the monetary and non-monetary costs. In this view, the present study is undertaken to study the effect of stress on employees in public and private sector banks (with special reference to haridwar city). This throw light in to the pathogenesis of various problems related to stress among bank employees. The study will be helpful to drawn up further arrangements on the related fields and act as a secondary data for further research.

## Literature Review

Dhankar, (June 2015) had tried to find out the stress level among employees of banking sector. There are several factors which determine the stress level of employees in banking sector. They are confliction, ambiguity, pressure,

work overloaded etc. In the modern life Occupational stress has become the leading feature. It has extensive effects on employees' behavior. A substantial portion of organization research involves the study of stress among employees. A numerous number of problems related to competence, low level of productivity and employee health is related to occupational stress. In the upcoming time minimizing occupational stress would be part of company policy of the organizations and can be seen as an essential strategy to target better employee satisfaction.

Jayashree, (2014) "stated that stress is an unavoidable factor in- the banking sector. She discovered in her findings that a majority of the employees faces psychological problems and stress- related ailments. Therefore, she suggested in her study that the management must take several initiatives to overcome their employees from this terrible stress effect.

S. Uma Mageswari, (May. 2014) has made an effort to identify the stress factors (stressors) and to examine the coping strategies among bank employees of different sectors. From the forgoing chapters, the researchers consolidate major findings and draws conclusions that world enable one to make valid suggestions for toning the stress management strategies in the banking sector. To a certain limit stress is a positive and enjoyable thing which leads to more productivity. Hence, effective stress management does not always mean minimizing or eliminating stress. It is to keep the stress at the best possible level. By giving special attention to the job content, stressors and managerial decision policies the overall stress further could be shifted at optimum level. By paying attention to role factors in addition to managerial and job factors, desired level of stress can be achieved in private banks. Employees with more experience should get more attention by the management. Similarly, management should attempt to satisfy people at the top level, who experience 'distress'. Training on coping strategies may be arranged for certain groups of employees who are older or who have higher qualifications, since they not only differ in the perception of stressors but also in the coping strategies, by recognizing the appropriate coping strategies, stress could be proactively reduced.

Masood, (September 2013) stated that employees try to work with energy, ability and determination even if support is not provided to them, they need to perform their tasks with honesty. They are more focused to avoided stress at their work place and directly affect their performance. If avoided then turn-over are unusually high and in this world of today, if such be the ratio of employee turn-over then organizations could collapse. This finally leads to increase the working conditions and the working relationships



among employees in the organizations. If the employees becoming overly stress during the job, they prefer to quit for few days and take rest at home.

Shukla & Garg, (December 2013) discussed that lack of quality in employees work puts stress on them. It is found that in banks maximum number of employees remains in stress. 50% employees feel that they are overloaded with work. 44% employees feel tensed due to their non-achievement of their target of work. 38% employees accepted that they will obey the order of their boss by sacrificing their important domestic function. It indicates fear and stress among employees. Due to their family related problems 24% employees feel stress. It means such employees feel greater level of stress as compared to other employees. Half of the employees accepted that there is conflict among the employees. It is a concern for top management. Only 48% employees feel that strategies used by banks to manage stress of employees are effective. Majority of the employees try to find solution to relieve them from stress. 50% employees use YOGA or other ways to relieve them from stress. In spite of stress, majority of the employee's balance in their social life.

Dayo Akintayo (2012) found that working environment is significantly related to worker's morale and also working environment is significantly correlated with perceived worker's productivity.

Pratibha Garg (2010) states that Job or occupational stress is mismatch between the individual capabilities and organizational demands. Employees often experience stress because of work overload, an expected work pace, difficult work schedules, role conflict, uncertainty regarding job security, poor interpersonal relationships and unpleasant working conditions. This stress manifests in conflict, depression, headaches, hypertension, alcoholism and other conditions. The organizations do not only lose money by paying medical bills but there is a loss of productivity.

Srivastava, (2009) discussed that there has been a growing support for the argument that role of the employee in the organization may create conditions that cause stress for employees at work affecting the quality of work life. Such Organizational role stress has been found to be negatively related to managerial effectiveness.

Kumar,(2006); Singh,(1989); Driscoll,(1994); Sen,(1981); Sharma & Devi,(2008) state that the main contributor to the stress of employees are Role stagnation, Role overload, lack of senior level support, lack of group cohesiveness, inequity at workplace, resource inadequacy in the role, constraints of change.

Associated Chamber of Commerce and Industry of India (ASSOCHAM), in a study conducted in 2007, has also reported that those working in the banking sector - both public and private- tend to get stressed as they have to attract a large pool of customers for various schemes besides ensuring timely recovery of loans.

Kang & Singh (2004) conducted a study in the Electronics Industry to identify stressors at work in which lack of Inter-Personal Relations, lack of Role Clarity, poor Organisational Climate and Structure, Insensitive Supervisor and Work Inhibitors emerged as the main stress factors.

Rose, (2003) discussed in her studies that employees have tendency towards high level of stress regarding time. Working for longer hours can reduce employees urge for performing better. Management support helps in increasing or reducing stress in employees.

Sabir et.al. (2003) suggest that the new age stressors are increased interaction with computers, computer breakdowns, computer slowdowns, electronic performance monitoring, central processing system etc.

Organisational climate and its impact on stress levels of employees have also been studied. Organizational climate refers to how the work environment is perceived by employees who are working in it, and how it influences their behavior. Wendell et al, (2004) describes Organisational Climate as "employees' perception and attitude about the workplace – of its value as a place to work, welcoming or otherwise". These conditions can also significantly impact their motivation levels, stress level and behaviour. According to David (2000) two most important factors that can create employee stress are ineffective supervision and poor teamwork.

## Research Objectives

1. To study the effect of stress on employees of public sector banks.
2. To study the effect of stress on employees of private sector banks.
3. To examine the factors which are responsible for causing stress in employees of both the sector of banks.
4. To identify the initiatives to be taken to overcome the stress level of the bank employees.

## Research Scope

1. Stress can be brought about by pressures at home and



at work. Employers cannot usually protect workers from stress arising outside of work, but they can protect them from stress that arises through work.

2. A real problem to the organization as well as for its workers is stress at work. Good management and good work organization are the best forms of stress prevention.
3. This study explores the application of positive psychology to enhance the wellbeing of employees, who often work in inherently difficult in their working environment.
4. It develops effective prevention and suitable programs to understand the factors associated with employee's stress.
5. This study captures the relationship between organizational stress and life satisfaction levels among employees who are involved in intense organizational work.

### Implication of Stress

1. Physical problems and health problems like heart diseases, ulcers, arthritis, increased frequency of drinking and smoking, cardiovascular, gastrointestinal, endocrine and other stress related disorders.
2. Psychological and behavioural problems: psychological problems like change of moods, inferiority complex, widespread resentment, reduced aspirations and self esteem, reduced motivation and job skills.
3. Organisational job dissatisfaction, behavioural problems, production turnover, increased absenteeism, increased accidents, lower productivity.

### Finding

The major findings of the study are:

1. It was found that majority of employee's in banking sector of haridwar city felt high level of job stress in the working environment. The main reasons of creating stress in them are the lack of financial resources, ineffective supervision, feeling unsecured at job, lack of updated knowledge and the unfair attitude of management towards them.
2. The majority of employees felt that in public and private sector banks, there is an inappropriate reward system. The financial benefits provided to the employees are not enough as they provided their services. Most of the employees provided their services without pay for many months, which is major cause of creating stress in public health sector employees.
3. Employees also felt that there is no proper timing of job; they can be called at any time for work. They found their job very tough to be performed, especially when they have very limited time for rest. This restlessness creates stress in them, as well as, effect on their health badly. The minority of employees indicated that job stress affects their productivity.
4. There seem to be an unsupportive working environment in the bank branches of haridwar city. The personal issues either at job or at home create negative effect on the productivity of employees. In case of new trainee or staff member, old employees felt uneasy to work, which also create stress in these employees.
5. The majority of employee's indicated that they have low control over their work environment. The reason behind that is the employees are not aware about the updated technology as well as the latest knowledge to operate. In some institutes of banks, all the updated facilities are available, but these institutes have limited or non-technical staff to utilize the updated facilities.
6. Management system of banks is also unsupportive. The majority of employees responded that management system is the major contributor of creating job stress in them. Because the management did not involve them in decision making. The decisions are implemented forcefully either they are acceptable by the employees or not. Employees felt unsecured themselves on the job, because due to lack of financial resources and to cover the space of work, most of the employees are recruited on contract basis. Due to unsecured future employees felt a lot of job stress and they could do their productivity decreased.
7. Employees become frustrated to perform different tasks at job. Multi task responsibilities are difficult for them to manage, and when the time is too short. In this way, they could not perform the whole work through relaxed mind, and become stressed.
8. It was found in the results that stress related factors are negatively associated with the employees' productivity with different intensities. All these negative stressed factors have causal relationship with the job stress. The research indicated as increased in these contributors happened job stress was increased, which affected the employees' physically, behaviorally and psychologically as well. In turn, with increased job stress, employees' productivity decreased.

9. Lack of acceptability, lack of support, impatient customers, political pressure, work life imbalance, feeling of inequality etc. are some other factors which cause stress in public and private sector bank employees.

### **Recommendations/ Initiatives To Be Taken To Overcome The Stress Level Of The Bank Employees**

1. Organize a Stress Management Program that focuses on different categories of employees at all hierarchical level.
2. Take adequate steps to redesign jobs, which are taxing to employees' abilities and capacities.
3. Adequate role clarification to be made whenever necessary to eliminate role ambiguity.
4. Introduce more job-oriented training programs, which improve employee's skill and their confidence to work effectively.
5. Encourage open channel of communication to deal work related stress.
6. Undertake stress audit at all levels in the organization to identify stress area improving conditions of job and alleviating job stress.
7. Introduce 'Pranayam' (Brain Stilling and control of Vital Force) as a holistic managerial strategy to deal with occupational strategy.
8. Provide counseling on work related and personnel problems and support from a team of welfare health and counseling staff.
9. Attractive system of reward and recognition for good work.
10. The managers and supervisors should give proper attention to the employees and create an amiable environment that may urge them to be responsible and productive.
11. The timings of the work should be flexible and proper in which employees do their best.
12. The management must play the role to resolve the conflicts among employees in working environment, and ensure them to maintain a friendly environment at job.

### **Conclusion of the Study**

On the basis of empirical findings, it is concluded that job stress is a real challenge for employees' who are working in the banking sector. Further, it is not only important to monitor the factors, but to create a healthy environment in which employees' work in efficient way. For this purpose, the study is conducted to monitor the effects of job stress on employees' productivity in public and private sector banks of (haridwar city). The variables are drawn through the literature which causes the job stress and affects the employees' productivity. The results indicated that stress related negative factors have negative effect on job stress and decreased the employees' productivity.

A majority of the employees face severe stress related ailments and a lot of psychological problems. Hence, the management must take several initiatives in helping their employees to overcome its disastrous effect.

Since stress in banking sector is mostly due to excess of work pressure and work life imbalance the organization should support and encourage taking up roles that help them to balance work and family.

The productivity of the work force is the most decisive factor as far as the success of an organisation is concerned.

The productivity in turn is dependent on the psychosocial well being of the employees. In an age of highly dynamic and competitive world, man is exposed to all kinds of stressors that can affect him on all realms of life. The growing importance of interventional strategies is felt more at organisational level. This particular research was intended to study the impact of occupational stress on Private Bank employees. Although certain limitations were met with the study, every effort has been made to make it much comprehensive.

### **Limitations of The Study & Scope of Future Research**

In drawing conclusions, it is important to note the limitation of the self-reporting nature of survey responses. The study is limited to the banking sector in the haridwar city but trans-national studies across countries can be done to understand the effect of stress in the banking sector across countries which are experiencing similar growth in this or any other sector. To map and mitigate stress levels among employees such studies could be done in sectors with similar growth pattern like aviation, hospitality sector, education etc.

## References

- Gupta, Palas R. and Adhikari, Ajoy (2008), "Role Stress in Nurses", The ICFAI Journal of Organizational Behaviour, Vol VII (1), pp. 49-56.
- Kumar, Dileep, M (2006), "A Study on Job Stress of Nationalized and Non-Nationalized Bank Employees", [http://www.indianmba.com/Faculty\\_Column](http://www.indianmba.com/Faculty_Column).
- Driscoll, Michael P.; Beehr, Terry A. (1994), "Supervisor Behaviours, Role Stressors and Uncertainty as Predictors of Personal Outcomes for Subordinates", Journal of Organizational Behaviour, Vol. 15(2), pp. 141-155.
- J., & Devi, A. (2011). Role stress among employees: An empirical study of commercial banks. Gurukul Business Review, 7(1), 53-61.
- Srivastav, A. K. (2009), Control Climate in Public Sector: Relationship with Role Stress, Coping Strategy and personal variables, Pranjana, Vol. 12(1), pp 51-63
- Wendell L. French and Cecil H. Bell, (2004). Organization Development. Tan Prints (India) Pvt. Ltd India.
- Kang, L.S. & Singh, R. (2004), "Identifying Stressors at Work - A Case of Employees in Electronics Industry", Decision, Vol. 31 (1) pp.51-72
- Sen, K. (2012). Occupational role stress—an exploratory study in the Indian public sector banks. Journal of Services Research, 12(2), 173-192.
- Dhankar, S. (June 2015). Occupational stress in banking sector. International Journal of Applied Research, 132-135.
- Jayashree, R. (August 2014). Stress Management With Special Reference to Public Sector Bank Employees in Chennai.
- International Journal of Enterprise and Innovation Management Studies, Vol. 1 No. 3, 34-39.
- Masood, A. (September 2013). Effects of Job Stress on Employee Retention: A Study on Banking Sector of Pakistan. International Journal of Scientific and Research Publications, Volume 3, Issue 9, 1-8.
- S Uma Mageswari, D. N. (May. 2014). Occupational Stress - A Study with Reference to Selected Bank Employees in Chennai Region. IOSR Journal of Business and Management, Volume 16, Issue 5. Ver. II, 115-125.
- Shukla, H., & Garg, M. R. (December 2013). A STUDY ON STRESS MANAGEMENT AMONG THE EMPLOYEES OF NATIONALISED BANKS. Voice of Research Vol. 2, Issue 3, 72-75.
- Agarwal, H., & Rastogi, N. K. (2018). A study of Methods and Techniques to Manage the Occupational Stress Among the Bank Employees of Meerut Region. Journal of Commerce and Trade, April, 13, 1.
- Rose M. (2003). Good Deal, Bad Deal? Job Satisfaction in Occupations. Work Employment Society, 17; 503.
- Ahmed, A., & Ramzan, M. (2013). Effects of job stress on employee's job performance a study on banking sector of Pakistan. IOSR Journal of Business and Management. e-ISSN, 61-68.
- Dayo, Akintayo (2012), Working environment, workers' morale and perceived productivity in industrial organizations in Nigeria, Education Research Journal Vol. 2(3), 87-93.
- 19. Garg P., (Sep 2010), Case Study, Vol 3, Punjab, 52-58
- Shukla, H., & Garg, R. (2013). A study on stress management among the employees of nationalized banks. Voice of Research, 2(3), 72-75
- Elahi, Y. A., & Apoorva, M. (2012). A detail study on length of service and role stress of banking sector in Lucknow region. Research Journal of Management Sciences \_\_\_\_\_ ISSN, 2319, 1171.

## Web Resources

1. [www.banknet.india.com](http://www.banknet.india.com)
2. [www.assocham.org/prels](http://www.assocham.org/prels)
3. [www.wikipedia.org](http://www.wikipedia.org)
4. [www.Stress.org](http://www.Stress.org)
5. [www.google.com](http://www.google.com)

# Changing Future of Rural Marketing: Indian Perspective

Ms. Teena Gupta\*

## Abstract

*In the highly competitive market, marketers are leaving no stone unturned to come out with flying colors. Now companies have only two options: Either Go Global or Go Rural. But going Global is very costly. Also it's difficult to tap markets in other countries. So It's better to reach rural market as it is growing at fast pace. Rural marketing in Indian economy has always played an influential role in the lives of people. Leaving out few metropolitan cities, all the district and industrial township are connected with rural market. Business conglomerates are increasingly getting attracted by the immense growth potential, Indian rural markets possess. The vicinities in India consist of about 650,000 villages which are inhabited by about 850 million consumers making up for about 70 per cent of population and contributing around half of the country's Gross Domestic Product (GDP). Consumption patterns in these rural areas are gradually changing and increasingly matching the consumption patterns of urban areas. Rural markets offer a great scope for a concentrated marketing effort because of the recent increase in the rural income because of better production, technology and higher prices for agricultural commodities. Owing to a favourable changing consumption trend as well as the potential size of the market, rural India provides a lucrative investment opportunity for companies. This paper depicts the importance and changing future of rural marketing in India. The methodology followed is a descriptive study using secondary data sources. As much as rural India presents a great opportunity to retailers, there are many challenges faced by Retailers which needs to be solved. This paper emphasized on the analysis those challenges and means to overcome these challenges also.*

**Keywords:** Go Rural, Rural Marketing, Indian Rural Markets, Concentrated Marketing Efforts, Consumption Trend

**“When you cannot predict it, create it.”**

## Introduction

Today we see that Indian economy is changing rapidly. Some changes are common and some changes seem particular and paradoxical. Indian economy witnesses one such bi-faceted change- National to global on one side, and urban to rural on the other. Marketers require visionary entrepreneurship to respond proactively to it. India's growth move is highly driven by the development of the rural India and rural marketing constitutes the nerve centre of rural development activities. The Rural Marketing refers to the activities undertaken by organizations to encourage the people in rural areas to convert their purchasing power into an effective demand for products and services and making these available in the rural areas, to improve their standard of living and achieving the company's objective, as a whole. Rural marketing is a two-way marketing process. It encompasses not only marketing of products to rural areas, but also products flow to urban areas from rural areas. The trade channels available in rural areas are private, co- operatives, processors, regulated markets, dealers and state agencies etc. Indian rural market is an area of darkness for businesses because it is vast in size

but unstructured. With over 70% of India's population, capturing rural markets is a very lucrative option for all sectors. The rural market is estimated to be growing fast as compared to the urban markets.

**Objectives of the study:** The primary objective was to study the importance and changing future of rural marketing in India. The secondary objectives were to know concept different challenges faced by rural Marketers and means to overcome these challenges

**Research Methodology:** The Research Methodology provides a systematic approach to fulfil the desired objectives as mentioned in the study. It is descriptive study based on secondary data obtained from various sources like journals, books, magazine etc.

**Results/ Interpretation:** Rural marketing is a lucrative option for Indian entrepreneurs. With its immense size and demand base, it offers plethora of opportunities to marketers. The concept of rural marketing has been in

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form of ambiguity in the people minds who think rural marketing is all about agricultural marketing. However, rural marketing includes flow of goods from urban sectors to the rural regions as well as the marketing of various products manufactured by rural area to urban areas.

**Future of Rural Marketing in India:** Few years back in India, the rural market was an unknown area and many companies were not interested in it, as the demand pattern was fragile and seasonal and purchasing power of people was poor. Poor Communication and transportation were also blocking growth of rural markets and availability of urban products in rural markets. But these things have been changed. In recent years, rural market has gained significance and importance in India, as the overall growth of the economy has increased the purchasing power of rural communities substantially. Now the rural areas are consuming a large quantity of Industrial and urban manufactured products.

Now everyone is looking at rural markets as the next growth driver in Indian market. The potentiality of rural markets is said to be like a “woken up sleeping giant” and estimated to be growing fast as compared to the urban markets. The rural bazaar is booming beyond everyone’s expectation. Rural markets have become sought after destinations for corporation by compulsion as well as by choice. Compulsion, because markets are saturated and there is nowhere to go and Choice, because they are attractive and viable. At the time of economic crisis, while the urban markets remain restrained due to cash crisis, rural economy has remained largely unaffected. A good crop has further added to their respite. The consumption rate is also increasing day by day. The high incomes combined with low cost of living in the villages have leads more money to spend and with the market providing them options, tastes are also changing.

It has been estimated that 12% of the world’s population resides in the rural areas of India. The McKinsey report (2007), On the rise on Consumer Market in India, predicted that in twenty years the rural Indian market will be larger than the total consumer markets in countries such as South Korea today, and around four times of the size of today’s urban market and estimated at \$577 Billion. Even MNCs have comprehended the idea of a re-established rural India waiting to happen.

According to the third annual edition of Accenture Research, “Masters of Rural Markets: From Touchpoints to Trust points - Winning over India’s Aspiring Rural Consumers”, Rural consumers are particularly aspiring to purchase branded and high-quality products. The report

highlights the better networking among rural consumers and their readiness to proactively seek information through various sources, to be better informed while deciding about purchase. Importantly, the wider reach of media has provided inputs to India’s rural consumers and influenced their purchase decisions. In line with this, rural consumers are moving towards a broader approach of value provided by products and services which involves price worth of utility, aesthetics and features, not just low prices.

**Reasons for Huge Potential of Rural Markets:** Rural India with its conservative perception has grown up over the years, not only in terms of income, but also in thinking. The standard of living and life-styles of Indian rural people have also changed. Following reasons cause the rapid growth of rural markets in India:

- **Population Growth:** Increasing population leads to increase in demand. At present rural population accounts for nearly 70% of total Indian population.
- **Growth in Income and New Employment Opportunities:** The rise in the income resulting from the new farming strategy is helping the growing aspirations of the rural people. The income from self employment policy, new employment and rural development efforts launched in the rural areas has increased the purchasing power of rural people.
- **Green Revolution:** Rural India derived considerable benefit from a technological breakthrough in form of green revolution. Adoption of new agrarian practices, selective mechanization, multiple cropping, inclusion of cash crops and development of associated activities like dairy, fisheries etc have helped in increasing disposable income of rural consumers and reduced their dependence on seasonality.
- **Attraction for Higher Standard of Living:** Increased contacts with urban people and easy availability of information due to rapid development of transportation and telecommunication have increased their awareness and desires about better living. They are motivated to change their consumption patterns. After the basic needs of food, cloth and shelter, they are looking at how to live better.
- **Rural Development Programme:** Rural development programmes from government and other sources contributed to improved life style of rural segments. Various measures like tax exemption, subsidy, concessions, incentives, high support prices, literacy drive has brought rapid growth of rural markets.

- **Literacy Growth:** The literacy rate is increasing in the rural areas. This brings social and cultural change in the buying behaviour of the rural consumer. They are exposed to mass media like TV, internet etc. which create new demand for goods and services.
- **Improved Rural Infrastructure:** Improved infrastructure has positive impacts on rural market in several ways. Availability of electricity, education, health, transportation, communication and entertainment etc has contributed to development of rural areas and rural market.
- **Marketing Efforts:** Firms like Bajaj, HLL etc., have started penetrating the rural market, realizing the rising expectations and the demand revolution in the rural India.
- The Government of India is planning to install 5 lakh Wi-Fi hotspots in rural areas to enable delivery of services like health and education in remote areas.
- Government has announced new projects as well as enhanced support for existing schemes for the rural economy. Some of the key highlights of the Interim Budget 2019-20 for rural development are:
  - The 'Pradhan Mantri Kisan Samman Nidhi' has provided nearly INR 75000 crore for vulnerable landholding farmer families with cultivable land up to two hectares. Direct income support of INR 6,000 per year will be provided to approximately 12 crore small and marginal farmers.
  - With an aim to double the income of farmers, Government has fixed the minimum support price (MSP) of 22 crops at minimum 50% more than the cost.
  - The Kisan Credit Card scheme will provide benefit of 2 per cent interest subsidy to farmers pursuing the activities of animal husbandry and fisheries, who are availing loans through the Kisan Credit Card. Further, they will also get an additional 3 percent interest subvention while repaying loan on time.
  - The 'Pradhan Mantri Shram-Yogi Maandhan' for the workers in unorganised sector with income up to INR 15,000 shall provide a secure monthly pension of INR 3,000 from the age of 60 years where they need to contribute a small affordable amount monthly during their working age.
  - The New Pension Scheme (NPS) has been liberalised. While contribution of the employee is same i.e. 10 per cent, the government contribution is increased by 4 per cent.
  - The government had considered 2.95 crore households without houses and given mandate for construction of 1.0 crore houses over a period of three years from 2016 to 2019 in first phase under PMAY G. Remaining 1.95 crore will be covered in the next three years (i.e. 2019 to 2022).

#### Government Initiatives for Rural Development:

Development of Rural area has always been a priority for governments in India after independence. They have come up with various useful schemes and initiatives for the development of rural India. Few are:

- Unemployment rate in rural India has declined to 4.3 per cent in January 2018 as a result of the Government's increased focus towards rural jobs and MGNREGA scheme.
- The Ministry of Rural Development is expecting to achieve 100% rural connectivity under the Pradhan Mantri Gram Sadak Yojana (PMGSY).
- Shyama Prasad Mukherji Rurban Mission (SPMRM) aims at development of infrastructure, economic activities and skills in rural areas. It will provide Critical Gap Funding (CGF) to the Project to supplement the funds.
- Mahila Kisan Sashaktikaran Pariyojna (MKSP) seeks to support the existing agriculture-based livelihoods of the poor farmers and participation of women in agriculture and enhance productivity. This is done by creating eco system for supporting small entrepreneurs in rural areas. The programme is currently being implemented in 153 blocks across 23 states and aims to support around 20000 entrepreneurs during the project period.
- The National Bank for Agriculture and Rural Development (NABARD) is planning to provide around 200,000 point-of-sale (PoS) machines in 100,000 villages and distribute RuPay cards to over 34 million farmers across India, to enable farmers to undertake digital and cashless transactions.

**Challenges for Rural Marketing:** The peculiarities of rural markets and rural consumers pose problems for marketers in reaching them effectively. The main challenges of rural marketing are discussed below:



- **Low Standard of Living:** Rural consumers have low purchasing power contributing to a low standard of living and demand which results in low turnover for companies and adds to their interest burden.
- **Underdeveloped People:** Rural society in India is underdeveloped. Low Literacy, poverty and untimely hurried shopping are major contributors to failure of forming associations.
- **Transportation Bottlenecks:** Most rural markets are paralyzed in the absence of proper transportation and networking systems. Many parts of India have kuccha roads. There exists difficulty in accessibility and delivery of products and services. They generally deal with agro-based products like fruits, vegetables, fish, poultry and dairy products, which get spoil if not transported properly.
- **Warehousing Bottlenecks:** Agricultural commodities are produced seasonally but demanded over the year. But Marketers face problems of storage because of lack of public as well as private warehousing.
- **Inadequate Media Coverage:** Media have lots of problem in rural areas. Print medium is not much effective because of low literacy rate. Television is a good source to communicate but due to non availability of power as well as television sets, they cannot get the benefits of various media.
- **Many Languages:** In India, the numbers of languages vary from region to region. Language becomes barrier in designing effective communication strategy. Urban are largely dominated by English and Hindi whereas rural areas often need communication programs to be in local language and idioms.
- **Seasonal Marketing:** Demand in rural areas is mostly seasonal and fluctuating due to agriculture situation. Demand for consumer goods will be high during the harvesting period, because this is the time at which the rural people have substantial high cash flow.
- **High Inventory Cost:** Rural outlets do not have necessary knowledge and aptitude to decide the optimum level of inventory. They often have unnecessary stock which squeezes out their profit margin.
- **Inadequate Bank and Credit Facilities:** A large majority of the villagers do not understand banking facilities. Producers and wholesalers do not extend full support to rural outlets in the form of liberal credit due to the limited potential. Consumers often need credit for shopping but it is very difficult for rural retailers because generally they work with limited working capital.
- **Packaging:** Smaller packages are popular in rural areas. But all products are not available in small packages. Also, labelling is not in the local language. Hereby not much useful for rural people
- **Segmentation Problem:** Demand the rural outlets is different for people living in different areas with different climatic conditions, occupations, literacy level, income level, outlook towards life and their exposure to modern goods and services. It makes the segmentation difficult.
- **Lack of Desire for New Lifestyle:** Being a tradition bound community; rural consumers are strongly influenced by traditions, culture and false believe. They are confined to basic necessities.
- **Challenge for Indian Brands:** Foreign products will soon enter the rural markets challenging the survival of Indian brands. India's consumer base is poor, and they prefer value for money. Foreign brands, with inherent cost structures, are delivering affordable products.

#### Creating Successful Rural Marketing Strategy:

Considering the environment, any strategy for rural markets should focus on availability, accessibility and affordability. For rural market, it will be ideal to think of strategies from the marketing mix point of view i.e. strategies related to 4 P's of marketing - Product, price, place and promotion.

#### Product Strategies

- **Small and Low-Price Packing:** By making the product available in small packaging at low price, a company can attract rural consumers to at least try the product. For example: Shampoos, Biscuits, Vicks five grams.
- **New Product Design:** A company can try for new or modified product designs that are specially meant for rural areas considering their lifestyles.
- **Sturdy Products:** The product should be sturdy enough to bear rough handling and storage. People in rural areas like bright and glittery colours such as red and feel that products with such colours are robust. They are more concerned with the utility of the item also.

- **Brand Name:** The brand name awareness in the rural areas has fairly increased. A brand name and logo are very essential for rural consumers to remember the product.

### Pricing Strategies

- **Low Cost Products:** This strategy can be adopted by both manufacturer and retailer. Price can be kept low by packing in small unit.
- **Simple Packaging:** Simple packaging should be adopted in place of sophisticated packaging to cut down the cost i.e. biscuits.
- **Reusable Packaging:** Reusable packaging attracts the attention of rural buyers because it is useful for them even after consumption of product. For ex: Plastic Containers provided by Chyawanprash.
- **Application of Value Engineering:** This is a technique to evolve cheaper products by substituting the costly raw material with the cheaper material, without sacrificing the quality or functional efficiency of the product. For example, in food industry, Soya protein, which is cheaper, can be used instead of milk protein.

### Distribution Strategies

- **Using Own Delivery Vans:** Marketers can use delivery vans for two purposes. It can take product in every corner of the market and also enables sales promotion for the firm. But only big companies can adopt this channel because of cost factor.
- **Annual Melas and Mandis:** Melas, haats and mandis are very popular and works as a very good platform for distribution because people in rural area visit them often to make purchases. By making product available in these Markets, a firm can cover large rural area.

### Promotion Strategies

- **Promoting with Indian Actors, Sportsman and Folk Singers:** Companies should pick Indian models, actors and sports Team for advertisements as this will help them to show themselves as an Indian company. For ex: Vijender, Sakshi Malik and Sapna Chaudhary have huge fan following in rural area.
- **Paintings:** A picture speaks thousand words. This way of conveying message is simple and clean. Rural

people like bright colours. For ex: Coke and Pepsi use paintings to advertise their products.

- **Associating Them with India:** MNCs must associate themselves with India. MTV, during Independence Day and Republic Day, makes their logo with Indian tri-colour.
- **Communication in Local Language:** The companies have realized the importance of communication in local language for promotion. They have started selling quality products with proper communication.

### Others

- **Creating Quality Perception:** Companies are coming up with new technology and they are properly communicating it to the customer. As rural consumers always wanted value for money, one can notice difference in current market scenario.
- **Understanding Social and Cultural Values:** Companies have recognized that Cultural values play major role in deciding what to buy. Moreover, rural people are emotional and sensitive. Thus, to promote and communicate about their brands, Marketers are exploiting social and cultural values.

### Few Initiatives by Big Players in Rural Marketing:

There are many players which are directly or indirectly involved in rural markets. Few names are ITC, HUL, Tata and DSCL

#### ITC - E-Choupal & Chaupal Sagar

One of the most innovative concepts, e-Choupal, is an initiative to link directly with farmers for procurement of agricultural and aquaculture products through internet. Company also launched other programme, Choupal Saagar, which is a physical infrastructure hub that provides collection and storage facilities and offers multiple services at single place. Choupal Saagars have already started operations in the states of Madhya Pradesh, Maharashtra and Uttar Pradesh. ITC is planning to establish a chain of 100 Choupal Saagars in the near future.

#### Hindustan Unilever Limited (HUL) - Shakti Shakti

HUL identifies underprivileged women in villages and train them to become Shakti Entrepreneurs (SEs) i.e. distributors of HUL products to earn a sustainable income. The products, under project Shakti, are some of the country's most trusted brands specifically

relevant to rural consumers. From 17 SEs in 2001 to more than 45,000 SEs in 2008, Shakti has indeed come a long way in affecting lives in rural India. Now, with model, the smaller markets are now being referred to as 'Shakti markets.

#### • **DSCL-Hariyali Kisaan Bazaar**

Hariyali Kisaan Bazaar is a rural business centre which is creating a positive impact in farming sector in India. By understanding and supplying farming families with all their agricultural and household needs, these centres aim to engender trust and provide their customers with quality products and long-term advice. Each "Hariyali Kisaan Bazaar" centre operates in area of about 20 kms. A typical centre caters to agricultural land of about 50000-70000 acres and impacts the life of approx. 15000 farmers.

#### • **Tata Global Beverages - 'Gaon Chalo Abhiyan'**

This is a rural distribution initiative, in which entrepreneurs within the villages are organised to sell tea from Tata Global Beverages in their area. This helped to boost rural incomes as well as solved the company's problem of tackling the last mile rural distribution, which it faced due to low population density, poor road linkages and diffused settlements. Keeping in mind the operational constraints and pilot results, a self-help group (SHG) and entrepreneurship-based model was selected for operations.

Other initiatives taken are Nokia slow cost Handsets, Dabur- Indian Oil Partnership, Airtel's telecom Revolution in Rural India etc.

**Significance of the Study:** The study of rural marketing has become significant because of the saturation of the urban markets and increase in the purchasing power of the rural population. The rural market is a tough place to explore with many differences, difficulties and vagaries. The sector poses a variety of challenges including understanding the strategies to supply and satisfy the rural consumers but it also present huge potential for marketing of products and services.

#### **Conclusion**

The rural market is changing and shaping its future because it offers huge opportunities. Rural market also supports rural economy by providing infrastructure facilities, elevating the standard and quality of life of the people residing in rural areas. While exploring the opportunities in rural markets, one should not underestimate the

several unnerving problems in planning for growth. In order to develop marketing strategies and action plans, the organizations need to take into account the complex factors that influence the rural consumers buying behaviour. Government support is necessary in primary areas such as transportation, communication, roads, and credit institutions, crop insurance for better utilization of land and water management. The rural markets are enticing and marketing to rural consumers is exciting. However, a strong understanding of the rural consumers and their current and future expectations are the major part of strategies to tap the rural market nowadays.

#### **References**

- Balakrishnan, M. D. (1977). Rural Market: End of a Long Road for Consumer Marketers? *Decision*, 4(3), 177.
- Beshouri, C. P. (2006). A grassroots approach to emerging-market consumers. *McKinsey Quarterly*, 4, 60.
- Bijoor, H. (1999). Go Rural. *Economic Times*, June, 14.
- Budget 2019-20: An interim budget for the 'aam aadmi' and 'rural India' Retrieved from <https://retail.economictimes.indiatimes.com/news/industry/budget-2019-20-an-interim-budget-for-the-aam-aadmi-and-rural-india/67833470>
- Building Sustainable Value Chains (2018) Retrieved from <https://www.ruralmarketing.in/news/advertising-marketing/building-sustainable-value-chains>
- Dhumal, M. N., Tayade, A., & Khandkar, A. (2008). Marketing to Rural Consumers-Understanding and tapping the rural market potential. Retrieved from [Dspace. iimk. ac. in/bitstream/225/469/1/RM88-pdf](https://www.dspace.iimk.ac.in/bitstream/225/469/1/RM88-pdf).
- Indian Rural Market (2017) Retrieved from <https://www.ibef.org/industry/indian-rural-market.aspx>
- Lane, B., & Yoshinaga, K. (1994). Niche markets for the rural world. *The OECD Observer*, 190, 14.
- Malick, T. V., & Krishnan, J. J. (2014). Rural Marketing Strategies, Issues and Challenges. *International Journal of Engineering and Management Research*, 4(2), 116-122.
- Marketing in Rural India- A Challenging Prospect( 09

October 2015) Retrieved from <https://www.mbaskool.com/business-articles/marketing/14624-marketing-in-rural-india-a-challenging-prospect.html>

- Masters of Rural Markets: Profitably Selling to India's Rural Consumers (2015) Retrieved from [https://www.accenture.com/t20150922T083552\\_w\\_/in-en/\\_acnmedia/Accenture/Conversion-Assets/LandingPage/Documents/4/Accent](https://www.accenture.com/t20150922T083552_w_/in-en/_acnmedia/Accenture/Conversion-Assets/LandingPage/Documents/4/Accent)
- Mishra, P. RURAL MARKETING: THE REAL MARKETS OF INDIA. Primax International Journal of Commerce and Management Research.
- Notes on Demands for Grants, 2019-2020 Retrieved from <https://openbudgetsindia.org/dataset/52349744-e7b5-4369-af6b-9de9ce2fc519/resource/5f414a7a-e982-4f6d-8d64-f64b27edbb83/download/department-of-rural-development.pdf>
- Paninchukunnath, A. (2010). 3P Framework: Rural Marketing in India. SCMS Journal of Indian Management, 7(1).
- Rafiuddin, M. D., & Ahmed, B. (2011). Understanding the potential of rural marketing in India-an analytical study. ZENITH International Journal of Business Economics and management research, 1(2), 126-139.
- Rural India is full of opportunities (2016) Retrieved from <http://www.thehindubusinessline.com/opinion/rural-india-is-full-of-opportunities/article9367577.ece>
- Srinivas, K., & Jagtap, J. (2007). Indian retailing perspectives: Its growth, challenges and opportunities. The Indian committee association, 27(29).
- Subramanian, R., & Gupta, P. Leveraging the Indian rural opportunity: a new approach. Tata Strategic Management Group, 1-4.
- The 'bird of gold': The rise of India's consumer market(McKinsey report (2007), 2017) Retrieved from <https://www.mckinsey.com/global-themes/asia-pacific/the-bird-of-gold>
- Wright, K. A. (2001). Consuming identities: Global advertising, marketing and cultural identity in India (Doctoral dissertation, Duke University).

# Existence of HR Analytics in Organization

Dr. Asjad Usmani\*

## Abstract

*Human Resource analytics (HRA) involves the usage of data and data-based analysis as a basis for decision making in companies and is currently a hot topic in HR. Many expect HRA to be supportive in the context of HR developing into a strategic partner to the business. The importance of HR in taking on this role is emphasized also in the academic literature; however, the capability of HRA in enhancing this process is unclear due to the topicality of HRA and the fact that organizations are still at the beginning of implementing this new tool to support decision making. This study aims at providing first insights into currently felt effects after the implementation of HRA in companies that have already started using it.*

**Keywords:** Human resource analytics, spss, BI, BA

## Introduction

Human resource analytics (HR analytics) is an area in the field of analytics that refers to applying analytic processes to the human resource department of an organization in the hope of improving employee performance and therefore getting a better return on investment. HR analytics does not just deal with gathering data on employee efficiency. Instead, it aims to provide insight into each process by gathering data and then using it to make relevant decisions about how to improve these processes.

What HR analytics does is correlate business data and people data, which can help establish important connections later on. The key aspect of HR analytics is to provide data on the impact the HR department has on the organization as a whole. Establishing a relationship between what HR does and business outcomes – and then creating strategies based on that information – is what HR analytics is all about.

HR has core functions that can be enhanced by applying processes in analytics. These are acquisition, optimization, paying and developing the workforce of the organization. HR analytics can help to dig into problems and issues surrounding these requirements, and using analytical workflow, guide the managers to answer questions and gain insights from information at hand, then make relevant decisions and take appropriate actions.

Although the realm of human resources analytics can involve a wide range of activities, there are generally four core functions that manifest within the field. Those core functions are the acquisition, optimization, development, and paying of the employees within a business or organization. To optimize each of these core functions, human resources analytics representatives will work with managers by gaining information from them regarding the

issues And problems that pertain to their unique workforce. And HRA can be understood by BI and BA concept as follows:

### 1. Business Intelligence (BI)

Originating in the late 1980s in the realm of executive information systems, Business Intelligence (BI) is used by organizations to generate timely insights based on data, as a basis for faster and more reliable decisions, both at the strategic and operative levels. From a computer science perspective, it is defined as a specific kind of Decision Support Systems (DSS) that enable data-driven decisions by incorporating actions on data, such as gathering, storage, analysis and knowledge management. According to Kapoor (2010), the main components, or subsystems, of BI are:

Data Management- enables actions of extraction, cleaning and loading of data from different sources.

Business Performance Management (BPM)- the set of processes that pertains to strategic goals and objectives, measurement and analysis of performance and decision making. BPM consists of tools that visually condense data for consultation and dissemination of information

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(e.g. dashboards), monitoring a predefined set of Key Performance Indicators (KPIs).

Information Delivery- Enables/ restricts users to access reports and monitor business performance.

Advanced Analytics- includes all actions that apply statistical and mathematical models to data for prediction, optimization and discovery purposes. BI can also be considered a process made up of two main activities:

Getting data in (or data warehousing)- Transferring and transforming data from various sources to an integrated data warehouse, so that it can be more easily retrieved, compared and analyzed. It is challenging and very resource-consuming, but fundamental to maintaining overall coherence. Data is usually fed to smaller containers, 'data marts', focused on particular business areas (e.g. Marketing, Finance, etc.), geographical areas or applications.

Getting data out- accessing the data and using it for various purposes.

## 2 Business Analytics (BA)

Previously part of other academic areas, namely operations research & management, econometrics and financial analysis, BA is considered by researchers either as one component of BI, or as an emancipated field of research and practice. In the literature there is no agreement on definitions, and different authors highlight distinct characteristics of the discipline.

### According to the authors, BA can be seen as:

A movement – it demands that organizations commit to a distinctive mind-set, according to which they exist and ought to act on the basis of problem-solving that is guided by evidence, encompassing a certain culture and philosophy of managers.

A collection of 'how to' modes and technologies – without the need to undertake any dogmatic mind-set, BA could be practiced in organizations where tools and knowledge are somehow available. These modes or practices include collecting, selecting, generating and eventually transmitting knowledge in the form of evidence to different stakeholders, by the means of technology, a transformational process – where evidence is translated into insights or action, under the influence of individual, group and organizational culture.

A capability set – in a given organization, it determines

how evidence is managed, how models are constructed and applied, as well as logical reasoning. It includes both the potential for executing analyses and how efforts are effectively coordinated, impacting what transformational processes are prioritized and whether a 'BA movement' is potentially constrained.

A group of activity types – namely access, examination, aggregation and analysis of evidence.

A decisional paradigm – an approach to or example of how decisions are made.

BA is not just about decision making, but rather about recognizing, understanding and solving problems as a foundation for action.

## 3 HR Analytics (HRA)

In this specific context, the term 'HR Analytics' is preferred, in order to maintain coherence with the BA framework. Some of the other labels are:

**Human Capital Analytics.**

**Talent Analytics.**

**Workforce Analytics.**

**People Analytics.**

**HR Intelligence.**

Sometimes multiple terms are found in the works of prominent scholars argue for the existence of differences between some of the terms: the label 'Workforce Analytics', they claim, does not belong to the HR domain and might even assume a negative, exploitative connotation; on the contrary, 'People Analytics' is seen as more positive in relation to employees. The researchers eventually use 'HR Analytics' in their work, along with several other scholars.

A practice, or set of practices, connected to HR research, which is carried out in a context of HR strategy and decision-making: HRA as a practice is enabled by information technology, and it can allow data-driven decisions. Through practice, different aspects related to employees can be monitored, such as performance, feedback, support, and talent management.

An approach, or set of approaches, to improve decisions in HR, which aims to link HR investments to financial returns

with evidence. HRA as an approach translates into a more or less complex set of tools, technologies and applications of methods, from simple HR reporting of metrics to more advanced predictive modelling.

A process that links HR practices to organizational performance, through statistical techniques and models, by searching for cause-effect relationships within data. HRA as a process can either measure transactional efficiency, effectiveness of HR policies, or strategic impact of HR practices.

A method which utilizes data from the business for reasoning through logical analyses.

## 1.2 Background

The first attempts to show that the HR function is able, equally to other fields, to manage its expenses effectively and generate value for organizations can be traced back to the 1970s, through the creation of metrics defining costs, time and quantity of HR activities. In parallel, disciplines such as finance and economics join the discussion, with the creation of new fields such as HR Accounting and Personnel Economics. Similarly, new terms and concepts are introduced, for example HR Key Performance Indicators, attempting to measure HR performance using the HR scorecard method. Or Human Capital Metrics, attempting to demonstrate the relationship between Human Capital investment and economic value.

Progressively, as argued by Fitz-Enz (2010), a change of paradigm happens in the discipline, from mere accounting of HR activities to broader human capital management, with attempts to use statistical applications for predictive purposes. Over time, the interest for HRA increases among researchers and practitioners. It can thus be argued that HRA as a distinctive field of research is eventually reaching a critical mass.

## 1.3 Tools for HR Analytics

### 1 RStudio

R is the most used HR analytics tool. R is great for statistical analysis and visualization which is very suited to explore huge data sets. It enables you to analyze and clean data sets with millions of rows of data. In addition, it lets you to visualize your data and analysis, like what you see below.

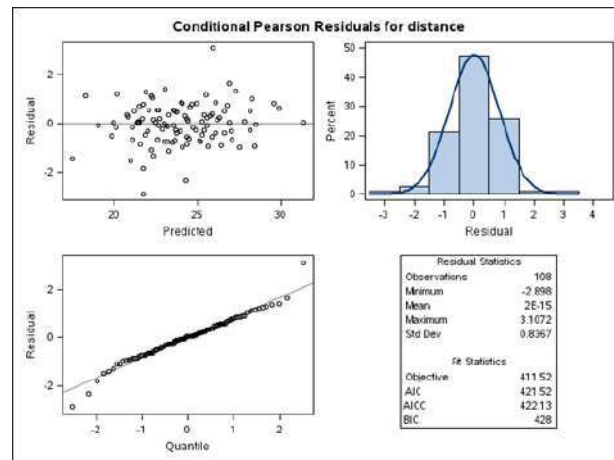


Image 1: R studio

However, we chose RStudio as our top pick for HR analytics tools.

RStudio is an open source and enterprise-ready professional software package for R. It basically does everything that R does, but has a friendlier user interface. The interface contains a code editor, the R console, an easily accessible workspace, and history and room for plots and files. You can take a look at an example of this below.

As previously stated, R is very useful because it enables you to work with much larger datasets compared to for example Excel. Furthermore, R has a very extensive library with R packages.

These packages are easy to install and allows you to do very specific statistical analyses and create beautiful visualizations. Take for example the caret package. This package enables you to split data into training and testing sets to train algorithms using cross-validation

## 2 Python

Python is another programming language, and can be used interchangeably for R. In the data science community, there's quite a bit of buzz about which will become the data scientist's tool of choice.

While R is better at doing statistical analyses, has a more active community in regard to the field of statistics and is better suited for visualizations, Python has a faster learning curve.

## 3 Excel

When we talk about HR analytics tools, we shouldn't forget the basics.

Excel is where most of us started. It's no surprise that when you manually extract data from any of your HR systems, it most likely comes in the form of a comma-separated value (CSV) file. These files can easily be opened and edited using Excel.

The good thing about Excel is that it's very intuitive to most of us HR data geeks and therefore easy to use.

For example, if you wanted to check how clean your data is, you can easily transform a dataset into a table and check each column's data range for outliers.

This way, if you select the age column you can easily check minimum and maximum ages. You wouldn't expect anyone below 16 to work at your company, nor would you expect anyone over the age of 80 to work for you. These outliers can be found in one single click.

Some quick tips on how to use Excel for HR analytics purposes:

When you work with large files, transform them into Tables. Excel is able to work much more efficiently with tables.

Don't use Excel formulas in large data sets. When you calculate a column using an Excel formula, transform the outcome to a numeric value. Formulas are recalculated every time you make a change in the data set. This places a significant and unnecessary burden on your computer's memory and processing speed – and bogs down Excel.

Categorical variables (Gender: Male, Female) are easy to check in a table. Select the table column and check for errors or inconsistencies. Can you spot the two inconsistencies in the picture?

If you want to merge two data sets, the 'VLOOKUP' function is your best friend. It makes connecting two separate data sets very easy.

Pivot tables do a great job in summarizing large quantities of data. Pivot tables and the VLOOKUP function practically enable you to do HR analytics in Excel.

#### 4 Power BI

Gartner's Magic Quadrant for Business Intelligence shows Microsoft as the absolute leader. That's why we included Microsoft's PowerBI. It makes the aggregation, analysis, and visualization of data very simple.



Image 2: Power BI

With Power BI, it's a cinch to connect to multiple source systems, like SQL databases with people data, a live twitter feed and/or machine learning APIs. All these different data sources are then combined in Power BI. This simple aggregation process enables you to combine multiple data sources in one large database. *Since both Power BI and Excel are owned by Microsoft, integrating of Power Query in Excel works quite smoothly. This makes Power BI an excellent option for a budding HR analyst.*

The consolidated data can then be used to create a pivot table (using Power Pivot). This lets you get quick insight in key areas of your workforce.

The same data can then be transformed into a dashboard, using Power BI's dash boarding capacity. An example of this dashboard can be found below.

#### 5 SPSS

SPSS is one of the most commonly used HR analytics tools in social sciences. Thanks to its user-friendly interface you're able to analyze data without having extensive statistical knowledge. In addition, SPSS is often used within the field of social science. This means that a lot of HR professionals know how to use it, especially the ones with an interest in data analysis.

This is also the reason why we put SPSS on the list and

not its biggest competitor, SAS. SAS is more widely used outside of the social science field. However, SAS has a steeper learning curve. In addition, SPSS shares many similarities with Excel which makes it easier to work with.

*This clip provides a great introduction to SPSS*

Consider SPSS an easy stepping stone for companies with less mature analytical capabilities. SPSS makes it easy to do an exploratory correlation analysis or a quick regression analysis. For more complicated (machine learning) algorithms, R is the better candidate.

How to choose the right HR analytics tool

In order to select the most appropriate HR analytics software tool, it's crucial to know what you want to achieve. Do you want to:

- *Get a grip on your data and create (HR) dashboards?* Go for a tool like **Power BI** or **Tableau** (Tableau excels in data visualization, but is much more expensive to work with, money-wise). Such tools make data aggregation and data visualization quite simple.
- *Get some basic insights in your company and employee data,* for example by checking if departments differ significantly in terms of employee performance or engagement? Go for the simpler tool like **Excel** and **SPSS**. They require a low level of analytics skills and can already give you some vital insights in your data.
- *Thoroughly analyze HR data and make predictions about the future?* Go for data analysis tools like **Phyton** or **RStudio**. They provide you with the capability to do the most advanced analyses out there – all while handling huge quantities of data. Some examples are predicting employee turnover and job classification analysis.

## 2. Emerging Managerial Implications

There are several practical implications for the companies that are attempting to spread HRA. This section concentrates on what the research considers to be the most important implications. If the organization intends to spread HRA faster, efforts should be addressed to make the concept more understandable to the HR community, and to make HRA tools easier for end-users.

Similarly, as individual adoption starts with awareness, it is particularly important that the organization informs

and educates HR professionals on what is HRA and how it can be used for HR work. At the same time, diffusion can proceed faster if the organization addresses issues of trial ability and observability, through the identification or creation of business cases.

Individuals tend to continuously confirm the usefulness of an innovation, therefore HRA efforts should not be lump sum, but rather receive constant support and clear directions from decision-makers, potentially through the creation of a dedicated HRA team that can serve all divisions, or through the identification of champions at different levels beyond the number that can push HRA usage.

The HR Analyst should be considered all key areas towards which to address organizational efforts, primarily approaching issues of mind-set, resistance to share across divisions and HR areas, and clearly identifying a path between the obtainment of insights and their use for decision-making – for instance making HRA one of the strategic priorities, and utilizing measurable indicators in HR strategy exercises.

Finally, the needs of HR professionals should be taken into account, for instance that for simpler solutions and access to data from different areas: the first need could be met by increasing data integration, through business information architecture efforts. The second aspect can be addressed by reviewing policies on permission levels and information delivery. Another area to work on is the establishment of dedicated trainings and quick guides for practical consumption. The need to see results of HRA in small-scale projects can once again be met by creating business cases, which at the same time represent a safe environment to build and test models, and provide the opportunity for HR professionals to observe the power of HRA innovation.

## Conclusion

People analytics can revolutionize the way organizations recruit, develop, engage and retain their staff.

The benefits of “big data” can equally be applied to people challenges, from recruitment and development to performance management, engagement, compensation, workforce planning and retention.

Doing this can transform the effectiveness of organizations. However, too many HR teams miss out on this opportunity because they don't know how to capitalize on the data, they have available.

Talent data is one component of this. However, people analytics is a broader concept because it encompasses all of an organization's employees, not just those who have been identified as "talent".

Correlating employee data against business outcomes provides actionable insights that can help HR leaders make more informed people decisions. And that can do by following way:

**Recruitment:** HR Analytics will be helpful for talent Analytics in which the HR is able to find right talent internally or externally and also able to fulfill the gap between the Demand and supply of People.

**Training and Development:** The Proper training should be provided to HR people for using HRA in a proper way and also design appropriate training modules and arrange training session online or offline for employee development.

**Knowledge Management:** Knowledge management is an emerging trend of HRA that store the knowledge and experiences of the employees or top-level employees to use it for better Decision making

**Compensation and Rewards:** Through HRA, updating or increment would be done on basis of employee performance and also by internal changes in compensation structure and maintain the employee data and analyses the upcoming changes.

**Retention:** The HRA can be used to find the proper Retention strategy that will vary from employee to employee it would be easier to retain by understanding their Behavior and retain the best talent and maintain workforce diversity.

## Bibliography

- Bose, & Jose,(2018), Evolution of Human Resource Analytics : An Exploratory Study, Vol.12 Iss.1/4, Retrieved From [https://www.academia.edu/38426545/Evolution\\_of\\_Human\\_Resource\\_Analytics\\_An\\_Exploratory\\_Study](https://www.academia.edu/38426545/Evolution_of_Human_Resource_Analytics_An_Exploratory_Study),on 15January 2019
- Erik, HR Analytics tools, Retrieved from <https://www.analyticsinhr.com/blog/hr-analytics-tools/> on 28 January 2019
- Gupta, B.N., &Shaikh, Md., (2018), PEOPLE ANALYTICS: NOVEL APPROACH TO MODERN HUMAN RESOURCE MANAGEMENT

PRACTICE, Vol.5 (Iss.7), Retrieved From <https://zenodo.org/record/1341965#.XKcuw5gzbiU> on 14 March 2019

- Heuvel, (2016), THE RISE OF HR ANALYTICS: A PRELIMINARYEXPLORATION, Retrieved from [https://www.academia.edu/32498771/The\\_Rise\\_of\\_HR\\_Analytics\\_A\\_Preliminary\\_Exploration](https://www.academia.edu/32498771/The_Rise_of_HR_Analytics_A_Preliminary_Exploration) on 20 March 2019
- Heuvel & Bondar Ouk, (2016). What is HR Analytics?, Retrieved from <https://www.analyticsinhr.com/blog/what-is-hr-analytics/> on 6 February 2019
- Lakshmi, P. &Pratap, P., (2016), HR Analytics – a strategic approach to HR effectiveness, Vol. 6 Iss.3, Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2838824](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838824) on 12 February 2019
- Momin, M., & Mishra, (2015), HR Analytics as a strategic workforce planning, Retrieved from <http://www.allresearchjournal.com/vol1issue4/PartD/pdf/1-5-14.1.pdf> on 26 February 2019
- Reddy, P., & Lakshmikeerthi, P., (2017). 'Hr Analytics' - An Effective Evidence Based HRM Tool, Vol. 6 Issue 7, Retrieved From [https://www.ijbmi.org/papers/Vol\(6\)7/Version-4/D0607042334.pdf](https://www.ijbmi.org/papers/Vol(6)7/Version-4/D0607042334.pdf) on 22 January 2019.



# The Service Sector as India's road to Economic Growth: An Analysis

Dr. Bhupendra Singh Hada\* Dr. Ashish Suri\*\*

## Abstract

*Services are tasks or functions, which are performed by a group or an individual, for which price is decided on the basis of demand if that particular service is available in the related market. Services are sometimes referred to as intangible goods. The consumption is done only at the point of production. Services are typically non-transferable that means they cannot be resold or purchased at a different price. In an economy the service sector perform a vital role in the resource allocation process. The service industry is not only the World's largest industry, but also contributes major portion in GDP. It generates three times more employment in comparison to the manufacturing sector. The contribution of the service industry to the GDP of countries like India is over 56.1% in 2015-16.*

*The service sector is not only the star performer in terms of employment generation, but has also attracted significant export growth, foreign direct investment flow, employment generation and portrayed itself for sustainable economic development. As per the report of Department of Industrial Policy and Promotion (DIPP) India's service sector has shown a remarkable presence to attract the maximum amount of FDI equity inflow during the period of April 2000 -December 2016, amounting to about US\$ 58.34 billion, which is about 18% of the total foreign inflow. In addition to this more than 50% of total export of services comes from export of software services in India. On the basis of this rapid growth in service sector growth rate will going to be more than 60 percent in the next fifteen years in India. After China, India has got the second position as the fastest growing service providing country in the world.*

*The present study is all about the analysis of the potential and capability of the service sector in the economic growth of the country over the last couple of decades. The main objective of this study is to see the correlation between the growth in the Indian service sector along with growth in the economy in terms of growth in GDP, per capita income and foreign investment.*

**Keywords:** Sustainable development, GDP, DIPP, FDI

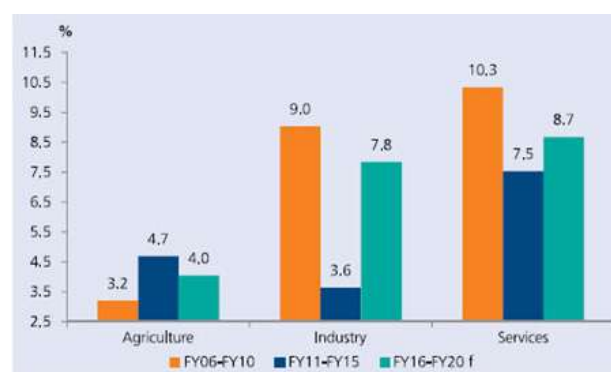
## Introduction

“Services are any tasks or functions, which is performed by a group or an individual, for which price is decided on the basis of demand if that particular service is available in the related market. Services are sometimes referred to as intangible goods. The consumption is done only at the point of production, services are typically non-transferable that means it cannot be resold or purchased on a different price. Service sector has a huge potential in a country like India.

According to Reserve Bank of India (RBI) along with World Trade Organization (WTO) there are ‘N’ number of service exist in the service sector and some of the major contributors are restaurant and hotel, communication, trade, transport, , storage, real estate, insurance, financing and business services along with construction services.

In utmost developed countries of the world, the services sector is contributing the major portion of its GDP and generates 3 times more employment than the manufacturing

sector. In recent years, services sector experienced a rapid shift in generating both income and employment. Thus it has been observed that the service sector has become a major player in almost all the countries of the world.



Growth in Industry and Service sector to resurge

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## Overview of Service sector in India

### Contribution of Gross Domestic Product:

The contribution of total services sector excluding construction in India's Gross Domestic Product (at constant prices), increased from 28.5 % in FY 1950-51 to 51.3 % in the FY2013-14. But the share of total services sector, apart from construction, to India's GDP at factor cost at current prices increased rapidly from 30.5 % in the FY 1950- 51 to 50.8 % in the FY 2010-11 and 54.40 % in the FY 2018-19 which contributes Rs. 169.61 lakh crore in Indian economy.

If we can include construction, then the same share of services sector improved from 56.8 % in FY 2000-01 to 59.6 % in FY 2013-14. Among the major components of services sector, the share of transport, Communication and trade in India's GDP (at constant prices) increased from 11.0 % in FY 1950-51 to 18.6 % in FY 2013-14.

The Contribution of community and personal services to GDP (at constant prices) improved from 8.5 % in FY 1950-51 to 13 % in FY 2017-18. The stake of real estate, business services & finance insurance increased from 9.0 % in FY 1950-51 to 20.96 % in FY 2018-19. Service sector made a rapid stride in last one and half decade and has appeared as largest & fastest growing sector of Indian economy which has reached at 7th position in world's GDP ranking in 2015-16 with a GDP size of almost \$2.25Tn. With a decadal average contribution of less than 30% over the period 1950-60 the contribution of service sector has now reached over 53%.

### Higher CAGR and Rapid Growth of Services Sector:

The significance of services sector towards Indian economy can be traced from its attainment of higher compound annual growth rate (CAGR). The CAGR of the services sector attained at 10.0 % during FY 2004-05 to 2011-12 has been found to be more than the 8.6% of CAGR of Gross Domestic Product (GDP) of India, which indicates that the services sector's growth rate is more as compare to industry and agriculture sectors. Services sector GVA (at current basic prices) has grown up at a CAGR of 6.25 per cent between FY12-FY19 to touch US\$ 1,294.41 billion. Moreover, the growth has been specifically marked in the public services, information technology & financial services.

The overall growth rate (CAGR) of service sector in 1990 was 7.5% and it increases up to 10.3% during 2004-05 to 2009-10 and it create a positive impact on the Indian

economy and the result was in 1990 the CAGR was 5.7% and it increases up to 8.6% in the period of 2004-05 to 2009-10. The services sector's growth was pointedly faster as compare to agriculture & industry sectors. During the year 2015-16 agriculture and manufacturing sectors have grown by 1.1% and 7.3% respectively, whereas service sector has shown a significant growth of 9.2% during the same period of time. It is expected that The Indian service market is grow at 17% CAGR during 2015 - 2020 and exceed the US\$19 billion mark reinforced by growing hospitality, retail, and real estate sectors.

### Employment Generation of Services Sector:

The contribution of service sector in terms of employment generation is now increases as compare to agriculture sector which was our primary sector. Up till 2018, 35% of India's labor force was employed in the services sector. During 1993-94 to 2009-10, there has been a huge drop in the stake of primary sector in employment from 64.75 % in 1993-94 to 53.2 % in 2009-10 and further less than 50% in 2015-16.

Although there was down fall in the agriculture in terms of employment generation but still, agriculture sector remains to be the biggest employment giving sector in India as compare to service sector which comes just after agriculture sector.

For this same period, the contribution of services and construction sectors in employment increased from 19.70 % to 25.30 % and 3.12 % to 9.60 % respectively.

There are certain state which remain top in the list in terms of employment generation in rural area like Sikkim, Tripura and Manipur and There are certain state which remain top in the list in terms of employment generation in urban area with very high share of employment in service like 879 and 826 out of 1000 employed persons.

Kerala stands on first position in terms of high share of employment generation in the rural services sector at 511 persons out of 1000 persons among the major states. Some major employment providing service sectors are public administration, education and community, Construction; trade, hotels and restaurant.

In urban areas of India the ratio of employment with services in most of the states varied like 877 in Meghalaya, 653 in Uttar Pradesh , 787 in Jharkhand, 833 in Assam, 732 in Bihar, 712 in Kerala, 717 in Maharashtra, 744 in Rajasthan, 641 in Gujarat, 683 in West Bengal and 587 in Tamil Nadu out of 1000 working people. The share of

service sector in employment generation in India need to improve as on global aspect service sector contributes 45% in total employment.

### Contribution to India's Services Trade:

In recent years India is grow as an export-oriented country. According to Balance of Payment (BoP) data, merchandise & services exports increased by 23% and 26% respectively during 2004-05 to 2018-19 and it contributes US\$ 16.87 billion in Indian economy.

In the world export of services, share of India's services exports increases from 0.6 % to 3.47 % during 1990 to 2017, and it has been growing quicker than the share of commodities exports in world exports which stood at 1.9% in 2015-16. In 2009-10 growth of service remains slow as a result there was global recession, but the drop in the development of service sector was less noticeable than the go-slow in commodities export growth and has recovered quickly in 2010-11.

India's services sector GVA raised at a CAGR of 6.93 % to US\$ 1,267.1 billion in FY 2018 from US\$ 846.8 billion in FY 2012, during the same period CAGR of merchandise exports grew at 19.7 per cent. If we enter into the details of services sector, CAGRs of software at 21 per cent was at lower level and financial services (29.2 per cent) were at higher level.

Major services export category is software in terms of size, and the contribution was US\$ 167.5 billion in FY 2018 from US\$ 154.6 billion in FY17. The Compound Annual Growth rate of merchandise imports, at 21.4 % as compared to CAGR for import of services was 20.21 %. Among the various items of services imports, transportation (20.5%) and non-software services (22.6%) had high Compound Annual Growth rate.

Moreover, the liberalization in the Indian economy replicated by total trade counting services as a percentage of Gross Domestic Product showed a higher degree of openness at 59.0 % in the financial year 2016-17 as compared to 25.4 per cent in FY 1997-98 and 38.1 per cent in 2004-05.

India ranked at 8<sup>th</sup> position globally in terms of export of services and contributes 3.3% of world's total export of services. While India's merchandise trade balance has always remained in negative during last 15 years, the trade balance of services has shown a positive trend during the same time. Merchandise trade balance in year 2014-15 stood at \$137.7bn while the service trade balance for the

same year was \$75.6bn.

### Services Sector Growth and FDI Inflows:

Some years ago many transnational companies, were give their focus only on their domestic markets, but now they shift their interest from domestic to internationalization which involve ambitious investments in other country. Now a days Asia is the most attractive destination for the big multinational business houses.

The FDI share of services includes real estate, computer software as well as hardware along with financial and non- financial services. Such FDI share of services was 40.5 % of accumulative Foreign Direct Investment equity in flows during the tenure of 2000 to 2012. Including the construction sector (6.5 %), the contribution of services in FDI inflows increases to 47.0 %.

In terms of cumulative FDI equity inflows during 2000 to 2011, the financial and non-financial services are found to be the largest recipients with 20.1 per cent, (\$ 31.7 billion), which is again followed by telecommunications with 7.9 per cent (\$ 12.5 billion), computer hardware and software with 6.9 per cent (\$ 10.9 billion), housing and real estates with 6.9 per cent (\$ 10.9 billion), and construction activities 6.5 per cent (\$ 10.2 billion) share.

The contribution of financial as well non-financial services in total Foreign Direct Investment inflows from these sourcing countries are Singapore 30.6 %, U.K 29.5 %, Japan 11.9 %, USA 21.9 % and Mauritius 20.1 %.

During the period April 2000-December 2018 these sectors has engrossed the highest amount of FDI equity inflows, which is near about 20% of the total foreign inflows amounting to about US\$ 70.91 billion.

### Contribution towards Development of Communication & Infrastructure Services:

Services sector has also been playing an important role in the management and development of infrastructure with a special emphasis on expansion of transportation as well as communication services. Government expenditure on telecommunications & infrastructure services increase by six times in the country – from US\$ 1.41 billion (Rs 9,900 crores) during 2009-14 to US\$ 8.55 billion (Rs 60,000 crores) (actual plus planned) during 2014-19. The contribution of storage, transport, and communication services to the Gross Domestic Product at factor cost (at current prices) in India ranges from 8.2 % in FY 2006-07 to 6.8 % in FY 2018-19.

### Contribution towards Growth of IT and ITeS:

The services sector has also cemented the way for a continuous growth of its IT & IT enabled services (ITeS) sector and thereby helping the economy of the country to attain higher growth. The IT and ITeS sector of the country has developed an image of a new and strong global knowledge power and has earned a brand identity in this sector.

Research and development (R&D), Engineering services, software products and Business process outsourcing (BPO) are four major sub-components of IT and IT industry.

According to NASSCOM estimates, India's Business process management sector and IT revenues were to the tune of US \$ 98 billion in FY 2015-16 and has been able to generate indirect employment of around 89 lakh and direct employment for around 28 lakh persons in the country.

The contribution of IT sector to GDP have grown considerably from 1.2 % in FY 1997-98 to 9.5 % in 2015-16 which was a significant part or proportion of national GDP.

Software exports from India from US \$ 99 billion in 2014-15 which was almost 12 % more as compare to last year. IT and ITeS industry dominate the exports and it contribute about 78.40% of total industry income.

The revenue comes from domestic sector of IT-ITeS and exports sector in 2010-11 were \$ 68.8 billion and \$ 19.0 billion respectively as compared to that of \$ 190 billion and \$ 39.45 billion attained respectively in 2018-19. Consistent and growing demand from US is largely responsible for increasing its part in total exports of India's Information technology and ITeS services.

### Contribution towards Development of Some Social Services:

Services sector is also contribute a substantial role in the development and expansion of some social, sports and cultural services etc it contributes 13.9% of GVA (Rs. 1,924,339 crore) at current prices for the FY 2016-17. Moreover, cultural activities, or services include TV broadcasting, radio, and entertainment and besides other related cultural services. In addition to the objective of Government of India is to preserve and promote all forms of art and culture. During the Eleventh Plan the total allocation of Rs 3,555 crore was made to this sector.

Throughout the world they have been identified as avital

element of job creation, growth as well as a transporter of cultural distinctiveness. India is the nation who deliver US \$ 4 billion worth of creative services in 2010 only at a CAGR of 26% so it create a positive impact in the growth of Indian economy.

As per the report of Ernst and young, "the Indian entertainment and media industry is worth at US \$ 26 billion in 2014 and is estimated to grow at a CAGR of 14.3% in the next six years (2014-20) to touch the figure of US \$33.9 billion".

However, the outlook and status of the services sector which had once fallen due to the global economic slow-down and financial crisis faced by US, but the same sector has turned its heads towards its revival and growth once again. The growing opportunities in this sector has been generating employment to many across the nation and are also attracting FDIs for attaining success in future.

The challenge faced by this sector will be to hold India's competitiveness in those areas where the country has made a spot viz. telecommunications, IT and ITeS etc. Besides, India has to face another challenge to penetrate into some outmoded areas such as shipping and tourism where other countries have already a stronghold. India's potential for success in the sector is very high. Thus these challenges faced by India need to be addressed if the country wants to realize its pipe dream of attaining double digit growth and generating large number of employment opportunities for its growing population in the days to come.

Finally, in a country like India, having a large size of population and presently enjoying the merit of population dividend in the form of increasing proportion of working age population, the potential & prospect of the services sector in producing income and employment for its people is quite optimistic.

### Literature Review

**Cahal (2015)** analyze the importance of service sector for the growth of Indian economy. His study shows that in the last two decades service sector has appeared as the leading and fastest-growing sector in the worldwide economy. This sector continues to play a role of star performer as well as unremittingly contributing significantly part in the GDP growth, employment generation and enhance the trade and investment in the country.

**Singh (2015)** said that on the way of its development and economic growth, India has touched a point where there is a prevalence of service sector. But without the



growth of industrial sector and agricultural, service sector single-handedly cannot continue its growth for the longer period due to the high forward and backward linkages of industrial and agricultural sector. His paper gives a significant impression on Indian services sector with major challenges for service sector of India and also provides some remedial step to overcome from these issues.

**Eichengreen and Gupta (2010)** in their research they analyze the causes of development in the services sector and measure the employment generating ability of services in India. They discovered that there are both types of labor skill as well as unskilled exist in the service and manufacturing sector in India. They find out that “whether India should continue exploiting its comparative advantage in services instead of following the usual route to economic growth in the process of economic development- which consists in building-up labor intensive manufacturing, or if these two approaches are in fact complementary strategies for enhancing economic growth and raising living standards in the country”.

### Objectives of The Study

1. To examine the role of service sector in growth of India's GDP.
2. To examine the role of service sector in per capita income in India.
3. To examine the role of service sector in growth of FDI in India.

### Research Methodology

#### Type of Data

The present study is quantitative in nature and secondary data will be used for the purpose of analysis.

#### Source of Data

The present study is built on secondary data. The sources of data include the evidences released by World Bank, World Trade Organization(WTO), Export & Import Bank of India(EXIM), Reserve Bank of India(RBI), Ministry of Commerce and Industry, Government of India etc.

### Analysis And Interpretation

- i. Correlation between Service Sector and GDP:

Year	Size of Service Sector (US \$ bn)	Size of GDP (US \$ bn)
2000-01	241	477
2001-02	252	494
2002-03	275	524
2003-04	324	618
2004-05	383	722
2005-06	448	834
2006-07	512	949
2007-08	675	1239
2008-09	687	1224
2009-10	778	1365
2010-11	974	1708
2011-12	893	1823
2012-13	920	1829
2013-14	951	1864
2014-15	1072	2042
2015-16	1220	2250
2016-17	1430	2274
2017-18	1500	2597

- ii. Correlation between Service Sector and Per Capita Income:

Year	Size of Service Sector (US \$ bn)	Per Capita Income (US \$)
2000-01	241	463
2001-02	252	471
2002-03	275	492
2003-04	324	572
2004-05	383	658
2005-06	448	749
2006-07	512	840
2007-08	675	1081
2008-09	687	1053
2009-10	778	1159
2010-11	974	1430
2011-12	893	1522
2012-13	920	1496
2013-14	951	1508



2014-15	1072	1627
2015-16	1220	1751
2016-17	1430	1862
2017-18	1500	1963

iii. Correlation between Service Sector and Foreign Direct Investment:

Year	Size of Service Sector (US \$ bn)	FDI (US \$ bn)
2000-01	241	4
2001-02	252	6.1
2002-03	275	5
2003-04	324	4.3
2004-05	383	6
2005-06	448	9
2006-07	512	23
2007-08	675	35
2008-09	687	42
2009-10	778	38
2010-11	974	36
2011-12	893	47
2012-13	920	34
2013-14	951	36
2014-15	1072	44
2015-16	1220	46.4
2016-17	1430	55.56
2017-18	1500	60.22

## Results and Findings

1. Correlation between Size of Service Sector and Size of GDP is found to be 0.987
2. Correlation between Size of Service Sector and Per Capita Income is found to be 0.986
3. Correlation between Size of Service Sector and FDI is found to be 0.939

## Summary of Findings

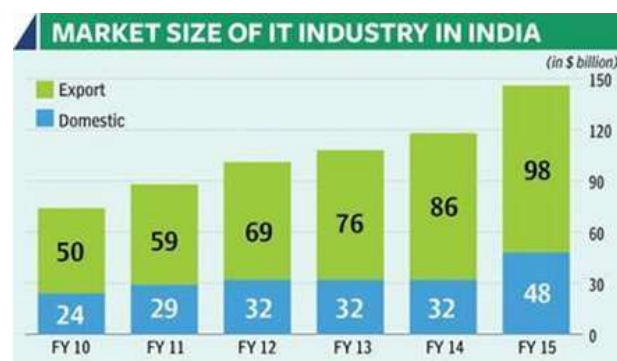
1. A very high degree of positive correlation is found between Size of Service sector in India and Size of GDP for the period under study. This proves that

the growth of service sector has contributed to the financial growth of India. Since 2000-01 the service sector has seen a fourfold jump and the same has been seen in the overall GDP size.

2. A very high degree of positive correlation is found between Size of Service sector in India and Per Capita Income for the period under study. This proves that service sector has contributed in raising the earning level of people in India.
3. A very high degree of positive correlation is found between Size of Service sector in India and FDI flow for the period under study. This proves the growth of service sector has resulted in more inflow of foreign investment in the country.

## Conclusion

The present study has shown the significance of service sector in sustainable economic development in India. For the period 2000-2018 service sector in India has attracted highest amount of foreign investment about US\$ 60.22 billion in 2017-18 which is about 17% of the total external inflows. India has arose as one of the leading country in providing IT services to the rest of the world. The size of Indian IT industry has crossed the mark of \$167bn. It also contributes almost 55% of total service export from India. Improvement in global and domestic factors will further drive the service sector to grow at a fast pace. Performance of other sub-sectors of service industry like hotels and restaurants, transportation, storage, communication, real estate, retail, hospitality, financing and insurance sectors will also improve in FY19. The growth in GDP will surely be driven by the performance of service sector.



## References

- Bhattacharjee, C. (2005), "Service Sector Management: An Indian Perspective", Jaico Publishing House.

- ChahalMukesh (2015), "An analysis of service sector in Indian economy", International Journal for Research in Applied Science & Engineering Technology, Volume-3, Issue-V
- Eichengreen, Barry and Gupta, Poonam (2010), "The service sector as India's road to economic growth?" Indian council for research on International economic relations, Working Paper no. 249.
- Jain, Sunil and Ninan, T.N. (2010), "Servicing India's GDP Growth", in Acharya, Shankar and Rakesh Mohan (ed.), "India's Economy: Performance and Challenges - Essays in Honour of Montek Singh Ahluwalia", Oxford University Press, pp. 328-365.
- Jay,Kandampully(2009), "service sector has major role in growth expert", Economic news.
- Jayasheela, D. and Hans,V.B (2011), "Service sector in India-A Sectoral Analysis", Global Research Publications.
- Joshi, Seema (2008), "Service Sector in India's Economy: Performance, Problems and Prospects", Country Paper submitted for "Study Meeting on Expansion and Development of the Services Industry in Asia", organised by Asian Productivity Organization at Seoul, Republic of Korea, June 17-20, 2008
- Mazumdar, D. and Sarkar. S., (2008), "Growth of Employment and Earnings in the Tertiary Sector: 1983-2000".
- Mukherjee,Arpita(2012), "Services Sector in India: Trends, Issues and Way Forward", World Economic Outlook, Pp 1-34.
- Nayyar, Gaurav (2012), "The service sector in India's development", Cambridge University Press.
- Prasad and Satish, (2010), "Policy for India's Service sector", Department of Economic Affairs, Ministry of Finance, Government of India, Working Paper no. 1, Pp 1-78.
- Singh Kuldeep, (2015), "The significance of service sector in Indian economy", International Research Journal of Management and Commerce, Volume-2, Issue-4.

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- [www.eximbankindia.in](http://www.eximbankindia.in)
- [www.rbi.org.in](http://www.rbi.org.in)
- [www.statisticstimes.com](http://www.statisticstimes.com)
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