

Micro Small and Medium Enterprise Sector in Indian Context

Prof. Dr. C. Swarnalatha, MBA., M.Phil., Ph.D.
M. Tharani, Research Scholar

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Abstract

MSMEs sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. The projected contribution of Micro, Small and Medium Enterprises (MSME) sector, including service segment, to the country's GDP during 2012-13 was 37.54 per cent; while the total employment in the sector is 805.24 lakh; and the share of MSMEs in India's total export for the year 2014-15 was 44.70 per cent. There are around 13.2 MSMEs in India out of which about 55% are in rural areas and balance in urban areas. This sector is extensive and diversified producing as many as 6000 products, contributing to 40% of the manufacturing output and 35% the direct exports. This paper descriptively explains the major information drawn on multiple sources of data including the Ministry of MSME, Government of India, Reserve Bank of India (RBI), Small Industries Development Bank of India (SIDBI), existing research literature, IFC publications, industry publications, other government publications and interviews with various stakeholders to size the market opportunity of MSME finance in India. The major source of information for the estimation of finance demand is the Fourth All India Census on MSME 2007 (MSME Census), Annual Reports of Ministry of MSME, SIDBI MSME Database 2010, National Accounts Statistics (NAS) Ministry Of Statistics and Program Implementation (MOSPI).

Key Words: Micro, Small and Medium Enterprises, Finance, Economic Growth and India.

1.1 Introduction

Micro Small and Medium Enterprises (MSMEs) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. The MSME sector has the potential to spread industrial growth across the country and can be a major partner in the process of inclusive growth. As per the estimates of 4th All-India Census of MSME Sector, “There are 29.8 million enterprises in various industries and this sector produces more than 6,000 products contributes about 8% to GDP besides 45% to the total manufacturing output and 40% to the exports from the country and this Sector consisting of 36 million units, as of today provide employment to over 80 million persons across the country”. The State-wise distribution of MSMEs show that more than 55% of these enterprises are in 6 States, namely, Uttar Pradesh, Maharashtra, Tamil Nadu, West Bengal, Andhra Pradesh and Karnataka. The MSME sector is a nursery of entrepreneurship and often being driven by individual creativity and innovation. The MSME sector in India is highly heterogeneous in terms of the size of the enterprises, variety of products and services produced and the levels of technology employed (Chandrasekhar, 2003). Indian government have enacted a separate act “The Micro, Small and Medium Enterprises Development (MSMED) Act” which was notified in 2006 to address policy issues affecting MSMEs as well as the coverage and investment ceiling of the sector. The sector is classified into Micro, Small and Medium based on the size of the enterprise, as defined in Table 1.

Table.1 Definition to MSMEs in India

Category of Enterprises	Type of Business	
	Manufacturing	Service
	Ceiling for Investment in Plant & Machinery	Ceiling for Investment in Equipment
Micro Enterprise	Upto Rs.25 lakh	Less than Rs10 lakh
Small Enterprise	Above Rs.25 lakh & Upto Rs.5 crore	Less than Rs.2 crore

Medium Enterprise	Above Rs.5 crore & Upto Rs.10 crore	Less than Rs.5 crore
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1.2 Economic Contribution of MSME

There are around 13.2 MSMEs in India out of which about 55% are in rural areas and balance in urban areas. This sector is extensive and diversified producing as many as 6000 products, contributing to 40% of the manufacturing output and 35% the direct exports. It also provides vital component and accessories to large scale sector. District Industries Centres across the country was 1.73 lakh which increased to 1.93, 2.13, 2.39, 2.84 and 3.23 lakh during 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13 respectively. This sector is a second largest employment provider next only to agriculture. It is breeding ground for business ideas and main driver of innovations. This sector has registered higher growth than overall industrial growth.

The projected contribution of Micro, Small and Medium Enterprises (MSME) sector, including service segment, to the country's GDP during 2012-13 was 37.54 per cent; while the total employment in the sector is 805.24 lakh; and the share of MSMEs in India's total export for the year 2014-15 was 44.70 per cent, the Parliament was informed and is growing at a rate higher than the projected GDP growth rate. Approximately there are 46 million Micro, Small and Medium Enterprise sector enterprises across various industries, employing 106 million people. The MSME sector in India has a minimum of 95% of industrial units, which accounts for almost 40 % of the gross industrial value-added in the Indian economy, exports and provision of direct employment to 20 million persons in around 3.6 million registered MSME units MSMEs are now exposed to greater opportunities than ever for expansion and diversification across the sectors. Indian market is growing rapidly and Indian entrepreneurs are making remarkable progress in various Industries like Manufacturing, Precision Engineering Design, Food Processing, Pharmaceutical, Textile & Garments, Retail, IT and ITES, Agro and Service sector.

1.3 Overall demand for finance in MSME sector

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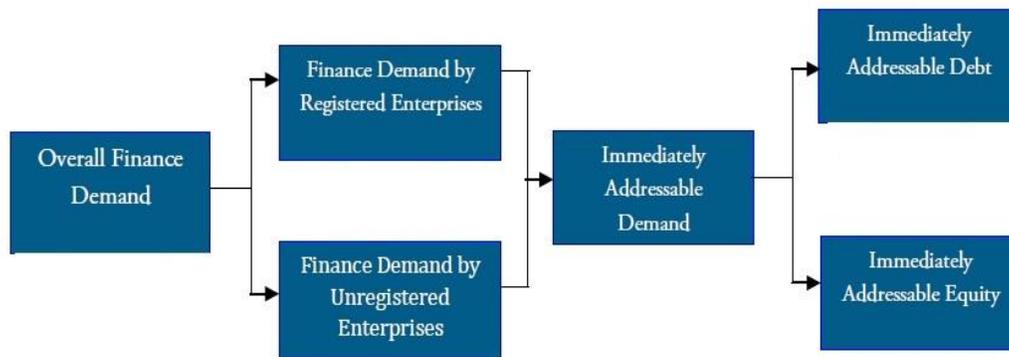
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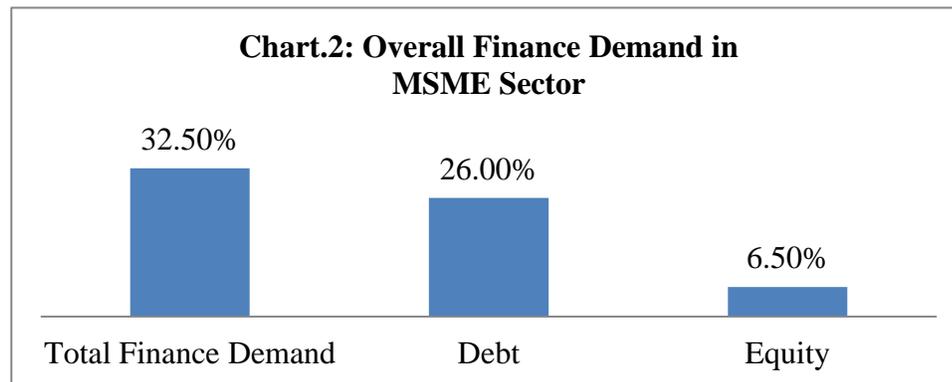
Although the MSME sector has been growing at a faster rate than the overall industrial sector, MSMEs experience multiple constraints that threaten to derail the sector's growth trajectory. As per "R H Patil Committee" (2005) the following are the key Growth Constraints for MSMEs (i) Inadequate market linkages, (ii) Lack of infrastructure, (iii) Inadequate finance, (iv) Lack of managerial competence, (v) Obsolete technology. In that inadequate finance plays a major role in constraining the growth of MSMEs. The Report of Working Group on Rehabilitation of Sick MSMEs by RBI also finds lack of adequate and timely access to working capital finance is one of the key reasons for sickness in the sector. The 2007 MSME Census indicated that only 5 Percent of enterprises in the sector had access to some form of formal finance, while over 92 Percent of the units lacked access to any form of institutional finance

Chart.1: Demand for Finance in MSME sector



Financial institutions have traditionally limited their exposure to the sector due to the perception that these businesses carry high risk and high cost of delivery, and have limited access to immovable collateral. A large number of micro services enterprises such as small retail trade and repair prefer informal sources to the formal financial. Small enterprises require higher capital investments and tend to operate in value-add manufacturing and knowledge-based service industries. Entrepreneurs who run small enterprises have a relatively better knowledge of external sources of finance. Unlike micro and small enterprises, medium enterprises exhibit a more predictable demand for debt, and these units are able to access multiple sources of capital. Businesses in the segment are typically structured as limited companies that allow for infusion of

alternative forms of capital such as equity. the manufacturing sector accounts for a smaller share of enterprises, operations are more capital-intensive, as a result of which working capital requirement tends to be higher in the manufacturing sector than that in the services sector. Service industries such as retail trade, repair and maintenance, and restaurants are typically cash businesses with shorter turnaround, because of which their overall external capital requirements tend to be low on an average.



Source: MSME Census, SIDBI, Primary Research, IFC-Intellectap Analysis

1.4 Overall Flow of Finance to the MSME Sector

The flow of finance to the MSME sector comprises informal finance, self-finance and finance from the formal financial sector. The Institutional informal sources for flow of finance for MSME sector are registered trade credit, chit funds and moneylenders channel etc. Entrepreneurs are estimated self-equity contributions also leverage personal resources and contribute equity to the enterprise. The flows of MSME debt finance from the formal financial sector are from banking and non-banking institutions and government financing agencies. Public Banks have a better access to MSMEs, and take the lead in lending to the sector, as compared to private and foreign Banks. Public banks have considerable empirical knowledge of the MSME sector, and with the increased use of core banking technology, they are able to analyse historical data on MSMEs to develop targeted products and better risk management techniques. NBFCs

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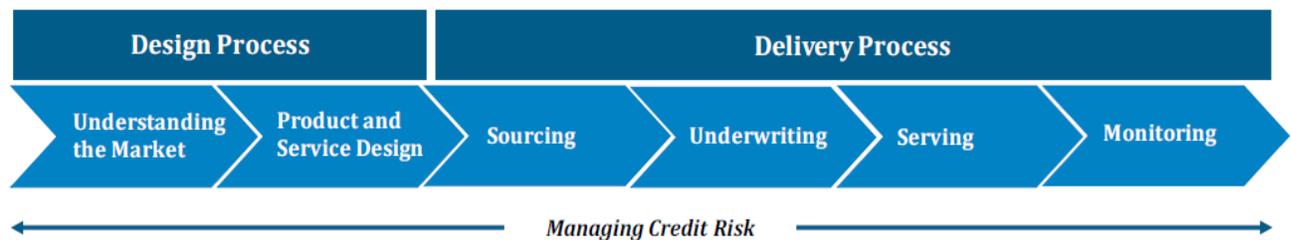
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provide an estimated INR 0.57 trillion (\$11.4 billion) of debt finance to the MSME (IFC-Intellect Analysis).

Microfinance institutions are often incorporated as NBFC-MFIs, and are mostly active in the unregistered and unorganized microenterprise segment. MFIs are gradually scaling up from providing individual loans to providing business loans for micro enterprises. The current flow of debt finance is uniformly distributed across Micro Small and Medium Enterprises. Based on the analysis of the data from RBI and other financial institutions, debt channelled to micro, small, and medium enterprise segments respectively is estimated to be INR 2.15 trillion (\$43 billion), INR 2.4 trillion (\$48 billion) and INR 2.42 trillion (\$48.4 billion). Although the process of providing debt and equity capital for financing the MSME segment is not a lot different from that followed for other segments, yet investors need to have differentiated product and marketing strategies for the sector. This is to factor in the heterogeneity and risk inherent in the MSME sector. The process for debt finance to the MSME segment comprises the following: (a) understanding the market (b) product and service design (c) sourcing (d) underwriting (e) serving and (f) monitoring.

Chart.3: MSME Sector Finance Process



Financial institutions can use several parameters such as area of operation, industry segment, vintage, legal structure, cluster operations to identify sub-segments that can be effectively served by leveraging institutional strengths. In some cases financial institutions identify enterprises in the vicinity of branches and use rule-of-thumb to address the financial needs of micro and small enterprises.

1.5 Finance Gap in the MSME Sector

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The lack of adequate and timely access to finance has been the biggest challenge. Financial institutions have limited their exposure to the sector due to a higher risk perception and limited access of MSMEs to immovable collateral. According to 4th MSME Census the finance gap in micro, small and medium enterprise segments is estimated to be INR 16.2 trillion (\$324 billion), INR 3.9 (\$78 billion) and INR 0.8 trillion (\$16 billion), respectively. The gap in debt is largely because of unserved micro enterprises and underserved small enterprises. Micro enterprises mostly operate in the service sector, and most entrepreneurs do not have access to immovable collateral to secure finance or get the sanctioned limits to be raised. Entrepreneurs have limited internal resources to capitalize (equity) the business and limited managerial experience, both of which make accessing debt capital from formal sources challenging. As a result, an enterprise is vulnerable to working capital strain.

The debt gap in the sector is attributed largely to a shortfall in working capital finance. Enterprises in the segment tend to have longer working capital cycles due to delayed realization of payments from buyers – median debtor days in the segment are estimated to be 90-100 days.

1.6 Environment for Growth of Finance to the MSME Sector

Growth of MSMEs needs to be reinforced by holistic fiscal support and enabling policies. The three main pillars of the enabling environment that the study has analysed are (a) legal and regulatory framework (b) government support (c) financial infrastructure support. Given the importance of the MSME sector for economic growth, the government and regulators have instituted several policies to facilitate the growth of the sector and encourage participation by financial institutions. The Micro, Small, Medium Enterprise Development Act, 2006 (MSMED Act) defines the micro, small and medium enterprise segments, and promotes focused and coordinated development of policy for the sector. The government has enacted the Credit Information Companies (Regulation) Act 2005 (CIC Act) to facilitate the formation of credit bureaus and strengthen the finance information infrastructure. The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI

Act) is a legal framework that protects creditor rights and facilitates recovery of non-performing assets without the intervention of the judicial system.

The Act is applicable to all loan assets created by a commercial bank, and broadly provides three alternative methods of recovering non-performing assets, namely, (a) securitization (b) asset reconstruction and (c) enforcement of security. Recognizing the importance of the MSME sector, the government has instituted various schemes and funding facilities for the development of the sector. Government interventions are aimed at improving the competitiveness and financial health of MSMEs.

Among the programs that are seen to have impacted access to finance are those for skill development, market linkage, technology adoption, cluster development and finance availability. The government has appointed National Small Industries Corporation Limited (NSIC) as the key implementation agency to manage electronic platforms that will foster business-to-business market linkages for MSMEs. The MSME sector is characterized by low adoption of technology, which impacts the sector's competitiveness. In order to encourage enterprises to invest in technology, the government also provides Credit-Linked Capital Subsidies (CLCS) for technology investments. The government leverages the credit infrastructure of the public sector banking network to make the subsidy available to MSMEs. A cluster is a location-based agglomeration of micro, small and medium enterprises that are faced with similar opportunities and challenges. Clusters tend to provide an ecosystem support.

1.7 Conclusion

The development of this sector came about primarily due to the vision of our late Prime Minister Jawaharlal Nehru who sought to develop core industry and have a supporting sector in the form of small scale enterprises. MSMEs sector has emerged as a dynamic and vibrant sector of the economy.

The Indian economy is expected to grow by over 8 per cent per annum until 2020 and can become the second largest in the world, ahead of the United States, by 2050, and the third largest after China and the United States by 2032. In this context it is very important to examine the role of MSMEs for economic growth of India. The ministry of Micro, Small, and Medium Enterprises in its vision envisages a vibrant MSME sector in the country exhibiting healthy growth through the setting up of new enterprises and up-scaling of the existing ones. Further, the contribution of MSMEs to the country's GDP is vital and efforts are being made to ensure that the MSMEs are focused on constituting a healthy proportion of the country's GDP. To achieve the ministry's objective and to have a healthy MSME sector in the country, it is crucial to remove all roadblocks to the growth of the sector. The Government's 'Make in India' program, with its focus on skill formation and innovation could be utilised for achieving MSME growth by directed efforts towards innovating ways of removing roadblocks and enabling a greater thrust to the overall growth and development of the MSMEs in India.

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Prof. Dr. C. Swarnalatha, MBA, M.Phil., Ph.D.
 Professor & Head
 Department of Management Studies
 Anna University Regional Campus
 Madurai 625 019
 Tamilnadu
 India
swarna@autmdu.ac.in

M. Tharani
 Research Scholar
 Department of Management Studies
 Anna University Regional Campus
 Madurai 625 019
 Tamilnadu
 India
tharani1771@gmail.com

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A Study on Job Involvement, Occupational Stress and Job Satisfaction among Teachers in Self-Financing Engineering Colleges in Anna University-Madurai Region

**M.Valan Rajkumar, Ph.D., R. Ilangovan, Ph.D., and
A.Velanganni Joseph, Ph.D.**

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Abstract

This paper focus on finding out, psychological test of job involvement, the perceived level of occupational stress and the job satisfaction among teachers in self financing engineering colleges affiliated to Anna University, Region III-Madurai. The enhanced feeling of involvement and satisfaction in the job would make the teachers have a positive attitude towards the teaching profession. The descriptive research design is used to conduct the research which describing the characteristics of a particular individual or of a group. The samples are collected from the universe, stratified random sampling is used, and to conduct this study 620 samples are collected out of 3015 teachers. For collecting the data, the questionnaire method is used. The data collected has been analyzed through the application of percentage analysis, ANOVA (analysis of variance) and T-Test. Finally the researcher analyzed the data using SPSS (statistical package for the social science) 15.0 version and found that there is a considerable level of psychological test of job involvement, impact of job stress and job satisfaction on demographic variables among teachers. Hence the engineering colleges have to look forward to an improved sense job involvement with reduction of occupational stress and increases job satisfaction among the teaching faculty to extract the best out of them. So the management should take necessary steps to reduce occupational stress among teachers because it will result in increased job involvement, job satisfaction and quality of education.

Key Words: Job Involvement, Occupational Stress, Job Satisfaction, Faculty Members, Engineering Colleges.

1. Introduction

Teaching is an art and the quality of teaching depends on the love, dedication and devotion of the teacher towards the subject of the knowledge. Teaching jobs are regarded as the noblest of all the professions in the world. The quality of education in any educational institute hinges on the availability of good teachers. A good teacher not only shows the right path that the students should follow but also prepares the human resource for the further development of the nation. Therefore, teaching jobs not only offer an opportunity to earn one's living but also to engage in one of the oldest and noblest professions. With education becoming the need of the hour it is an essential fact that teachers work with high levels of satisfaction which would result in a positive attitude towards teaching.

Thomas et al (2003) contend that job involvement is the degree to which a person is identified psychologically with his work, or the importance of work in his total self-image. Job involvement may also be thought of as the internalization of values about the goodness of work or the importance of work in the worth of the person, and perhaps it thus measures the ease with which the person can further be socialized by the organization. Begley and Cazjka (1993) are suggested that committed employees, because of their positive attitudes, are less distressed by occupational stressors and therefore they perceive less stress.

Occupational stress has been defined as a situation where occupation related factors interact with the employees in a manner that disrupts or enhances his/her physiological conditions forcing them to deviate from normal functioning (Jarvis 2002). Beehr and Newman (1978) defined occupational stress as "A condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning". Occupational stress is ubiquitous and increasingly costly Katherine et al (2008). Job satisfaction may be viewed as the pleasurable and emotional state resulting from the

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perception of one's job as fulfilling or allowing the fulfillment of one's important job values, provided these job values are compatible with one's need. Job satisfaction plays an important role as it has a positive impact on productivity, presence and performance.

2. Review of Literature

The term of job involvement can be described as “the degree to which one is cognitively preoccupied with, engaged in, and concerned with one's present job” (Paullay et al., 1994). Robinson et al. (2004) argued that the most of the work is surprisingly attract low attention from the organization and becomes popular. Some researchers also describes the term as intellectual and emotional commitment towards the organization (Richman, 2006). Different researcher explains the term by their own perception, Kahn (1990) define it as “the harnessing of organization members' selves to their work roles; in involvement, people employ and express themselves physically, cognitively, and emotionally during role performances”.

Kirkcaldy et al (2002) argued that the causes of stress include inadequate guidance and support from superiors, lack of consultation and communication, lack of encouragement from superiors, feelings of isolation, the political climate of the organizations and poor relationship with co-workers (Manshor et al 2003). Tehrani (2008) argued that stress is caused by unsympathetic organizational culture, poor communication between managers and employees, lack of involvement in decision-making, bullying and harassment, continual or sudden change, insufficient resources, conflicting priorities and lack of challenges.

Lore (1998) emphasized a strong relationship between job satisfaction and personal, professional, and material success. People who enjoy the aspects of work are found to accomplish more and are more likely to be considered for promotion and advancement.

According to Udris (as cited in Sutherland and Cooper 2000), qualitative overload is associated with job dissatisfaction, tension and low self-esteem, whereas qualitative under load is linked to dissatisfaction, depression, irritation and psychosomatic complaints.

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3. Methodology

To find out the psychological test of job involvement, the impact of occupational stress and the job satisfaction in selective engineering colleges affiliated to Anna University, Region III-Madurai. The researcher has used descriptive research design. Descriptive research studies are concerned with describing the characteristics of a particular individual, or a group, (C. R. Kothari, 2007). For conducting the study thirty six colleges having crossed four years are chosen from the population of 48 colleges. Out of which teachers who have served for two and more years in their present institution are taken as sample for data collection. 3015 teachers having crossed two and more years were working during 2015-16. Out of which 620 samples are collected. Here the researcher has used stratified random sampling to collect the samples from the universe. For collecting the data researcher has used questionnaire where categorized the questions into four perspectives (demographic variables, occupational stress index, job involvement, job satisfaction) which will enable the researcher to understand and analyze the impact of job involvement, occupational stress and job satisfaction among teachers. Finally the researcher has used SPSS software package 15.0 version for analyzing data.

4. Demographic Survey

The questionnaire included a demographic profile based on the purpose of the demographic questions to identify the respondents' demographic characteristics. These parameters included; age, sex, marital status, educational qualification, department, designation, total teaching experience, salary, lecture hours per week, distance between the institution and residence and survey districts.

5. Scaling

5.1 Job Involvement Scale

The survey questionnaire consists of six items. The aim is to measure the job involvement of teachers. A five points likert type scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree) is used to evaluate the impact on job involvement. The major **Engineering & Technology in India** www.engineeringandtechnologyinindia.com
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two points are considered in this paper, (i) I involve myself to deal very effectively with the problems of my students and (ii) I regularly spend time to keep abreast of current developments in my field

5.2 Occupational Stress Index

The survey questionnaire consists of twenty eight items. It's for measuring the occupational stress index (OSI) of the faculty members. A five point's Likert type scale (5-strongly disagree, 4-disagree, 3-neutral, 2-agree, 1-strongly agree) is used to measure the perceived level of occupational stress amongst teachers. The major two points are considered in this paper. (i) Feeling pressure to compete with my colleagues and (ii) Receiving inadequate salary to meet financial needs

5.3 Job Satisfaction Scale

The survey instrument consisted of five items. The aim of the scale is to measure the impact of amongst teachers on job satisfaction. A five points likert type scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree) is used to measure the impact on job satisfaction. The major two points are considered in this paper are (i) I am satisfied with the pay and benefits and (ii) I am encouraged to progress in my career.

6. Job Involvement-Data Analysis and Interpretations

6.1 Demographic Characteristics versus I involve Myself to deal very Effectively with the Problems of my Students

The demographic characteristics of teachers and their psychological test status on perceived level of job involvement of teacher aspects-I involve myself to deal very effectively with the problems of my students are presented in Table 1. The results indicate a significantly positive influence of job involvement (I involve myself to deal very effectively with the problems of my students) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in psychological test of job involvement aspects in all the **Engineering & Technology in India** www.engineeringandtechnologyinindia.com
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demographic characteristics and the mean psychological test score of teachers on perceived level of aspects significantly increased. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of aspects-I involve myself to deal very effectively with the problems of my students. In this perceived level of psychological test, the I involve myself to deal very effectively with the problems of my students seems to have less significantly in salary of the respondent, ie., $p \leq 0.008$.

6.2 Demographic Characteristics Vs I regularly Spend time to keep Abreast of Current Developments

The demographic characteristics of teachers and their psychological test status on perceived level of job involvement of teacher aspects-I regularly spend time to keep abreast of current developments are presented in Table 2. The results indicate a significantly positive influence of job involvement (I regularly spend time to keep abreast of current developments) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in psychological test of job involvement aspects in all the demographic characteristics and the mean psychological test score of teachers on perceived level of aspects significantly increased. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of aspects-I regularly spend time to keep abreast of current developments. In this perceived level of psychological test, the I regularly spend time to keep abreast of current developments seems to have less significantly in distance between home to working institution of the respondent, ie., $p \leq 0.006$.

Table 1: Table showing the ANOVA test between demographic characteristics and I involve myself to deal very effectively with the problems of my students

Job involvement	N	Mean	SD	Value	Significance
All	620	3.20	1.099		
Age of Respondent					

<i>below 30yrs</i>	338	3.24	1.109	F=0.781	P<0.505
<i>31-40yrs</i>	218	3.20	1.080		
<i>41- 50yrs</i>	50	3.00	1.125		
<i>above 50yrs</i>	14	3.07	1.072		
Sex					
<i>Male</i>	321	3.20	1.089	T=-0.055	P<0.719
<i>Female</i>	299	3.21	1.110		
Marital Status					
<i>unmarried</i>	292	3.19	1.096	F=0.618	P<0.603
<i>married</i>	314	3.22	1.095		
<i>widow</i>	6	3.67	1.211		
<i>divorced</i>	8	2.88	1.356		
Educational Qualification					
<i>Under Graduate</i>	56	3.45	1.111	F=2.003	P<0.112
<i>Post Graduate</i>	351	3.20	1.061		
<i>PG with M.Phil</i>	167	3.22	1.152		
<i>Ph.D.</i>	46	2.91	1.132		
Department					
<i>Engineering</i>	341	3.22	1.103	F=1.592	P<0.190
<i>MBA</i>	109	3.13	1.001		
<i>MCA</i>	76	3.04	1.171		
<i>Science and Humanities</i>	94	3.38	1.118		
Designation					
<i>Lecturer</i>	114	3.34	1.096	F=1.855	P<0.117
<i>Senior lecturer</i>	34	3.15	1.158		
<i>Asst. Professor</i>	386	3.22	1.075		
<i>Associate professor</i>	50	3.08	1.209		

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<i>Professor</i>	36	2.81	1.091		
Teaching experience					
<i>2-5yrs</i>	343	3.30	1.048	F=2.491	P<0.042
<i>6-10yrs</i>	154	3.15	1.095		
<i>11-15yrs</i>	79	3.06	1.244		
<i>16-20yrs</i>	27	2.70	1.068		
<i>above 20yrs</i>	17	3.29	1.263		
Salary (in Rs.)					
<i>less than 20000</i>	297	3.31	1.055	F=3.165	P<0.008
<i>20001-30000</i>	216	3.17	1.093		
<i>30001-40000</i>	64	3.11	1.249		
<i>40001-50000</i>	16	2.88	1.025		
<i>50001-60000</i>	15	3.20	1.082		
<i>above 60000</i>	12	2.17	1.030		
Lecture hour per week					
<i>below 12</i>	184	3.01	1.150	F=4.144	P<0.016
<i>13-18</i>	369	3.28	1.059		
<i>19 and above</i>	67	3.31	1.117		
Distance					
<i>Less than 15km</i>	222	3.21	1.139	F=1.147	P<0.318
<i>16-30km</i>	229	3.28	1.071		
<i>31km and above</i>	169	3.11	1.080		
District					
<i>Dindigul</i>	156	3.31	1.118	F=0.853	P<0.492
<i>Madurai</i>	276	3.19	1.038		
<i>Ramanathapuram</i>	62	3.08	1.258		
<i>Sivagangai</i>	81	3.23	1.099		
<i>Theni</i>	45	3.04	1.167		

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Table 2: Table showing the ANOVA test between demographic characteristics and I regularly spend time to keep abreast of current developments in my field

Job involvement	N	Mean	SD	Value	Significance
All	620	3.73	1.535		
Age of Respondent					
<i>below 30yrs</i>	338	3.63	1.561	F=1.902	P<0.128
<i>31-40yrs</i>	218	3.88	1.508		
<i>41- 50yrs</i>	50	3.60	1.539		
<i>above 50yrs</i>	14	4.29	1.069		
Sex					
<i>Male</i>	321	3.79	1.529	T=1.126	P<0.748
<i>Female</i>	299	3.66	1.541		
Marital Status					
<i>unmarried</i>	292	3.64	1.550	F=0.674	P<0.568
<i>married</i>	314	3.81	1.517		
<i>widow</i>	6	3.50	1.643		
<i>divorced</i>	8	3.75	1.753		
Educational Qualification					
<i>Under Graduate</i>	56	3.66	1.552	F=0.337	P<0.799
<i>Post Graduate</i>	351	3.77	1.531		
<i>PG with M.Phil</i>	167	3.64	1.576		
<i>Ph.D.</i>	46	3.80	1.424		
Department					
<i>Engineering</i>	341	3.78	1.543	F=0.507	P<0.678
<i>MBA</i>	109	3.72	1.497		
<i>MCA</i>	76	3.55	1.578		
<i>Science and</i>	94	3.68	1.526		

<i>Humanities</i>					
Designation					
<i>Lecturer</i>	114	3.69	1.529	F=0.217	P<0.929
<i>Senior lecturer</i>	34	3.62	1.498		
<i>Asst. Professor</i>	386	3.72	1.577		
<i>Associate professor</i>	50	3.90	1.329		
<i>Professor</i>	36	3.75	1.461		
Teaching experience					
<i>2-5yrs</i>	343	3.74	1.510	F=0.339	P<0.852
<i>6-10yrs</i>	154	3.72	1.619		
<i>11-15yrs</i>	79	3.58	1.549		
<i>16-20yrs</i>	27	3.89	1.476		
<i>above 20yrs</i>	17	3.94	1.391		
Salary (in Rs.)					
<i>less than 20000</i>	297	3.71	1.517	F=0.386	P<0.858
<i>20001-30000</i>	216	3.77	1.573		
<i>30001-40000</i>	64	3.66	1.586		
<i>40001-50000</i>	16	4.06	1.237		
<i>50001-60000</i>	15	3.67	1.345		
<i>above 60000</i>	12	3.33	1.775		
Lecture hour per week					
<i>below 12</i>	184	3.59	1.569	F=1.218	P<0.297
<i>13-18</i>	369	3.80	1.522		
<i>19 and above</i>	67	3.70	1.508		
Distance					
<i>Less than 15km</i>	222	3.88	1.501	F=5.180	P<0.006
<i>16-30km</i>	229	3.82	1.475		
<i>31km and above</i>	169	3.41	1.620		

District					
<i>Dindigul</i>	156	3.56	1.611	F=1.524	P<0.194
<i>Madurai</i>	276	3.80	1.502		
<i>Ramanathapuram</i>	62	3.48	1.576		
<i>Sivagangai</i>	81	3.81	1.509		
<i>Theni</i>	45	4.04	1.413		

7. OSI-Data Analysis and Interpretations

7.1 Demographic Characteristics versus Feeling Pressure to compete with my Colleagues

The demographic characteristics of teachers and their occupational stress status on perceived level of stress of teacher aspects-Feeling pressure to compete with my colleagues are presented in Table 3. The results indicate a significantly negative influence of occupational stress (I Feeling pressure to compete with my colleagues) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in perceived level of stress aspects in all the demographic characteristics. The mean occupational stress score of teachers on perceived level of stress aspects significantly increased with the increase in each demographic characteristics teacher belonging selective engineering colleges affiliated to Anna University, Region III-Madurai. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of stress aspects-Feeling pressure to compete with my colleagues. In this perceived level of stress test, Feeling pressure to compete with my colleagues seems to have less significantly in teaching experience of the respondent, ie., $p \leq 0.077$.

7.2 Demographic Characteristics versus Receiving Inadequate Salary to meet Financial Needs

The demographic characteristics of teachers and their occupational stress status on perceived level of stress of teacher aspects-Receiving inadequate salary to meet financial needs

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are presented in Table 4. The results indicate a significantly negative influence of occupational stress (Receiving inadequate salary to meet financial needs) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in perceived level of stress aspects in all the demographic characteristics. The mean occupational stress score of teachers on perceived level of stress aspects significantly increased with the increase in each demographic characteristics teacher belonging selective engineering colleges affiliated to Anna University, Region III-Madurai. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of stress aspects-Receiving inadequate salary to meet financial needs. In this perceived level of stress test, Receiving inadequate salary to meet financial needs seems to have less significantly in salary of the respondent, ie., $p \leq 0.094$.

Table 3: ANOVA test between demographic characteristics and Feeling pressure to compete with my colleagues

Occupational Stress Index	N	Mean	SD	Value	Significance
All	620	2.73	1.519		
Age of Respondent					
<i>below 30yrs</i>	338	2.70	1.562	F=0.655	P<0.580
<i>31-40yrs</i>	218	2.79	1.487		
<i>41- 50yrs</i>	50	2.54	1.358		
<i>above 50yrs</i>	14	3.07	1.542		
Sex					
<i>Male</i>	321	2.69	1.521	T=-0.610	P<0.724
<i>Female</i>	299	2.77	1.518		
Marital Status					
<i>unmarried</i>	292	2.72	1.554	F=0.658	P<0.578
<i>married</i>	314	2.72	1.487		
<i>widow</i>	6	3.17	1.472		

<i>divorced</i>	8	3.38	1.598		
Educational Qualification					
<i>Under Graduate</i>	56	2.68	1.619	F=0.322	P<0.809
<i>Post Graduate</i>	351	2.69	1.509		
<i>PG with M.Phil</i>	167	2.80	1.518		
<i>Ph.D.</i>	46	2.85	1.505		
Department					
<i>Engineering</i>	341	2.74	1.563	F=0.803	P<0.492
<i>MBA</i>	109	2.75	1.510		
<i>MCA</i>	76	2.88	1.366		
<i>Science and Humanities</i>	94	2.53	1.486		
Designation					
<i>Lecturer</i>	114	2.54	1.494	F=0.936	P<0.443
<i>Senior lecturer</i>	34	2.62	1.538		
<i>Asst. Professor</i>	386	2.77	1.531		
<i>Associate professor</i>	50	2.72	1.499		
<i>Professor</i>	36	3.03	1.483		
Teaching experience					
<i>2-5yrs</i>	343	2.59	1.525	F=2.115	P<0.077
<i>6-10yrs</i>	154	3.00	1.534		
<i>11-15yrs</i>	79	2.75	1.409		
<i>16-20yrs</i>	27	2.96	1.652		
<i>above 20yrs</i>	17	2.65	1.320		
Salary (in Rs.)					
<i>less than 20000</i>	297	2.64	1.545	F=0.619	P<0.685
<i>20001-30000</i>	216	2.81	1.496		
<i>30001-40000</i>	64	2.73	1.525		

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<i>40001-50000</i>	16	2.75	1.438		
<i>50001-60000</i>	15	2.87	1.302		
<i>above 60000</i>	12	3.25	1.712		
Lecture hour per week					
<i>below 12</i>	184	2.86	1.511	F=1.309	P<0.271
<i>13-18</i>	369	2.65	1.511		
<i>19 and above</i>	67	2.81	1.579		
Distance					
<i>Less than 15km</i>	222	2.85	1.534	F=1.146	P<0.319
<i>16-30km</i>	229	2.64	1.560		
<i>31km and above</i>	169	2.69	1.439		
District					
<i>Dindigul</i>	156	3.06	1.480	F=3.071	P<0.016
<i>Madurai</i>	276	2.61	1.549		
<i>Ramanathapuram</i>	62	2.42	1.325		
<i>Sivagangai</i>	81	2.69	1.497		
<i>Theni</i>	45	2.82	1.614		

Table 4: ANOVA test between demographic characteristics and Receiving inadequate salary to meet financial needs

Occupational Stress Index	N	Mean	SD	Value	Significance
All	620	2.46	1.195		
Age of Respondent					
<i>below 30yrs</i>	338	2.42	1.189	F=1.565	P<0.197
<i>31-40yrs</i>	218	2.46	1.203		
<i>41- 50yrs</i>	50	2.66	1.136		
<i>above 50yrs</i>	14	3.00	1.359		

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Sex					
<i>Male</i>	321	2.53	1.227	T=1.406	P<0.158
<i>Female</i>	299	2.39	1.158		
Marital Status					
<i>unmarried</i>	292	2.48	1.217	F=0.032	P<0.992
<i>married</i>	314	2.46	1.183		
<i>widow</i>	6	2.50	1.049		
<i>divorced</i>	8	2.38	1.188		
Educational Qualification					
<i>Under Graduate</i>	56	2.50	1.401	F=1.285	P<0.279
<i>Post Graduate</i>	351	2.39	1.158		
<i>PG with M.Phil</i>	167	2.60	1.187		
<i>Ph.D.</i>	46	2.50	1.225		
Department					
<i>Engineering</i>	341	2.36	1.184	F=1.958	P<0.119
<i>MBA</i>	109	2.56	1.308		
<i>MCA</i>	76	2.61	1.178		
<i>Science and Humanities</i>	94	2.62	1.089		
Designation					
<i>Lecturer</i>	114	2.53	1.305	F=0.379	P<0.824
<i>Senior lecturer</i>	34	2.32	1.065		
<i>Asst. Professor</i>	386	2.44	1.179		
<i>Associate professor</i>	50	2.50	1.249		
<i>Professor</i>	36	2.61	1.076		
Teaching experience					

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<i>2-5yrs</i>	343	2.37	1.233	F=1.446	P<0.217
<i>6-10yrs</i>	154	2.58	1.071		
<i>11-15yrs</i>	79	2.65	1.241		
<i>16-20yrs</i>	27	2.52	1.122		
<i>above 20yrs</i>	17	2.29	1.312		
Salary (in Rs.)					
<i>less than 20000</i>	297	2.33	1.230	F=1.888	P<0.094
<i>20001-30000</i>	216	2.57	1.097		
<i>30001-40000</i>	64	2.56	1.283		
<i>40001-50000</i>	16	2.75	1.342		
<i>50001-60000</i>	15	2.40	1.183		
<i>above 60000</i>	12	3.00	1.128		
Lecture hour per week					
<i>below 12</i>	184	2.54	1.187	F=0.646	P<0.524
<i>13-18</i>	369	2.42	1.166		
<i>19 and above</i>	67	2.51	1.375		
Distance					
<i>Less than 15km</i>	222	2.53	1.172	F=2.128	P<0.120
<i>16-30km</i>	229	2.34	1.194		
<i>31km and above</i>	169	2.56	1.219		
District					
<i>Dindigul</i>	156	2.37	1.142	F=0.701	P<0.591
<i>Madurai</i>	276	2.53	1.207		
<i>Ramanathapuram</i>	62	2.47	1.183		
<i>Sivagangai</i>	81	2.51	1.286		
<i>Theni</i>	45	2.31	1.164		

8. Job S-Data Analysis and Interpretations

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8.1 Demographic Characteristics versus I am Satisfied with the Pay and Benefits

The demographic characteristics of teachers and their perceived level of job satisfaction of teacher aspects-I am satisfied with the pay and benefits are presented in Table 5. The results indicate a significantly positive influence of job satisfaction (I am satisfied with the pay and benefits) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in all the demographic characteristics. The mean score of teachers on perceived level of job satisfaction aspects significantly increased with the increase in each demographic characteristics teacher belonging selective engineering colleges affiliated to Anna University, Region III-Madurai. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of job satisfaction aspects-I am satisfied with the pay and benefits. In this perceived level of job satisfaction test, I am satisfied with the pay and benefits seems to have less significantly in educational qualification of the respondent, ie., $p \leq 0.016$.

8.2 Demographic Characteristics versus I am Encouraged to Progress in my Career

The demographic characteristics of teachers and their perceived level of job satisfaction of teacher aspects-I am encouraged to progress in my career are presented in Table 6. The results indicate a significantly positive influence of job satisfaction (I am encouraged to progress in my career) status of teachers belonging selective engineering colleges affiliated to Anna University, Region III-Madurai in all the demographic characteristics. The mean score of teachers on perceived level of job satisfaction aspects significantly increased with the increase in each demographic characteristics teacher belonging selective engineering colleges affiliated to Anna University, Region III-Madurai. However, the mean value of the demographic characteristics of each respondent is not showing any significant differences in the perceived level of job satisfaction aspects-I am encouraged to progress in my career. In this perceived level of job satisfaction test, I am encouraged to progress in my career seems to have less significantly in salary of the respondent, ie., $p \leq 0.008$.

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Table 5: Table showing the ANOVA test between demographic characteristics and I am satisfied with the pay and benefits

Job Satisfaction	N	Mean	SD	Value	Significance
All	620	2.85	1.128		
Age of Respondent					
<i>below 30yrs</i>	338	2.86	1.116	F=0.406	P<0.749
<i>31-40yrs</i>	218	2.89	1.159		
<i>41- 50yrs</i>	50	2.74	1.084		
<i>above 50yrs</i>	14	2.64	1.151		
Sex					
<i>Male</i>	321	2.83	1.118	T=-0.419	P<0.860
<i>Female</i>	299	2.87	1.140		
Marital Status					
<i>unmarried</i>	292	2.90	1.126	F=0.550	P<0.648
<i>married</i>	314	2.81	1.125		
<i>widow</i>	6	3.17	1.472		
<i>divorced</i>	8	2.63	1.188		
Educational Qualification					
<i>Under Graduate</i>	56	2.66	1.164	F=1.027	P<0.380
<i>Post Graduate</i>	351	2.87	1.099		
<i>PG with M.Phil</i>	167	2.93	1.170		
<i>Ph.D.</i>	46	2.72	1.148		
Department					
<i>Engineering</i>	341	2.96	1.122	F=3.322	P<0.019
<i>MBA</i>	109	2.57	1.040		
<i>MCA</i>	76	2.84	1.223		
<i>Science and Humanities</i>	94	2.82	1.126		

Designation					
<i>Lecturer</i>	114	2.68	1.075	F=2.191	P<0.069
<i>Senior lecturer</i>	34	3.06	1.099		
<i>Asst. Professor</i>	386	2.88	1.144		
<i>Associate professor</i>	50	3.12	1.081		
<i>Professor</i>	36	2.58	1.131		
Teaching experience					
<i>2-5yrs</i>	343	2.83	1.098	F=0.751	P<0.558
<i>6-10yrs</i>	154	2.88	1.195		
<i>11-15yrs</i>	79	2.94	1.136		
<i>16-20yrs</i>	27	2.59	1.217		
<i>above 20yrs</i>	17	3.12	.928		
Salary (in Rs.)					
<i>less than 20000</i>	297	2.85	1.107	F=1.492	P<0.190
<i>20001-30000</i>	216	2.88	1.165		
<i>30001-40000</i>	64	2.97	1.098		
<i>40001-50000</i>	16	3.13	1.147		
<i>50001-60000</i>	15	2.33	.816		
<i>above 60000</i>	12	2.33	1.303		
Lecture hour per week					
<i>below 12</i>	184	2.81	1.132	F=1.841	P<0.159
<i>13-18</i>	369	2.91	1.120		
<i>19 and above</i>	67	2.64	1.151		
Distance					
<i>Less than 15km</i>	222	2.86	1.189	F=0.016	P<0.984
<i>16-30km</i>	229	2.84	1.077		
<i>31km and above</i>	169	2.86	1.120		

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District					
<i>Dindigul</i>	156	2.74	1.191	F=0.587	P<0.672
<i>Madurai</i>	276	2.87	1.105		
<i>Ramanathapuram</i>	62	2.94	1.069		
<i>Sivagangai</i>	81	2.90	1.158		
<i>Theni</i>	45	2.96	1.086		

Table 6: Table showing the ANOVA test between demographic characteristics and I am encouraged to progress in my career

Job Satisfaction	N	Mean	SD	Value	Significance
All	620	2.74	1.668		
Age of Respondent					
<i>below 30yrs</i>	338	2.75	1.670	F=0.341	P<0.796
<i>31-40yrs</i>	218	2.75	1.673		
<i>41- 50yrs</i>	50	2.58	1.679		
<i>above 50yrs</i>	14	3.07	1.639		
Sex					
<i>Male</i>	321	2.76	1.647	T=0.329	P<0.194
<i>Female</i>	299	2.72	1.693		
Marital Status					
<i>unmarried</i>	292	2.83	1.676	F=0.994	P<0.395
<i>married</i>	314	2.65	1.655		
<i>widow</i>	6	2.67	1.862		
<i>divorced</i>	8	3.38	1.768		
Educational Qualification					

<i>Under Graduate</i>	56	2.91	1.832	F=0.520	P<0.669
<i>Post Graduate</i>	351	2.68	1.637		
<i>PG with M.Phil</i>	167	2.77	1.686		
<i>Ph.D.</i>	46	2.91	1.658		
Department					
<i>Engineering</i>	341	2.81	1.686	F=0.949	P<0.417
<i>MBA</i>	109	2.50	1.608		
<i>MCA</i>	76	2.78	1.740		
<i>Science and Humanities</i>	94	2.73	1.614		
Designation					
<i>Lecturer</i>	114	2.86	1.724	F=1.212	P<0.305
<i>Senior lecturer</i>	34	3.18	1.660		
<i>Asst. Professor</i>	386	2.65	1.658		
<i>Associate professor</i>	50	2.94	1.671		
<i>Professor</i>	36	2.69	1.582		
Teaching experience					
<i>2-5yrs</i>	343	2.78	1.694	F=0.640	P<0.634
<i>6-10yrs</i>	154	2.60	1.615		
<i>11-15yrs</i>	79	2.72	1.702		
<i>16-20yrs</i>	27	3.00	1.641		
<i>above 20yrs</i>	17	3.06	1.560		
Salary (in Rs.)					
<i>less than 20000</i>	297	2.78	1.687	F=0.992	P<0.421
<i>20001-30000</i>	216	2.68	1.658		
<i>30001-40000</i>	64	2.78	1.695		
<i>40001-50000</i>	16	3.19	1.721		
<i>50001-60000</i>	15	2.00	1.309		

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A Study on Job Involvement, Occupational Stress and Job Satisfaction among Teachers in Self-Financing Engineering Colleges in Anna University-Madurai Region

<i>above 60000</i>	12	3.00	1.537		
Lecture hour per week					
<i>below 12</i>	184	2.86	1.644	F=1.862	P<0.156
<i>13-18</i>	369	2.64	1.644		
<i>19 and above</i>	67	2.99	1.838		
Distance					
<i>Less than 15km</i>	222	2.59	1.663	F=1.510	P<0.222
<i>16-30km</i>	229	2.86	1.695		
<i>31km and above</i>	169	2.77	1.633		
District					
<i>Dindigul</i>	156	2.62	1.620	F=0.905	P<0.461
<i>Madurai</i>	276	2.70	1.679		
<i>Ramanathapuram</i>	62	2.97	1.568		
<i>Sivagangai</i>	81	2.96	1.792		
<i>Theni</i>	45	2.71	1.674		

9. Findings

- The variable of job involvement-It is inferred that the majority of the teachers increase their job involvement compared with the demographic characteristics of the respondent at present as well as in future.
- The variable of OSI namely-It is inferred that the majority of the teachers decrease their occupational stress compared with the demographic characteristics of the respondent at present as well as in future to increase their job involvement and job satisfaction.
- The variable of job satisfaction-It is inferred that the majority of the teachers increase their job satisfaction compared with the demographic characteristics of the respondent at present as well as in future.

10. Conclusions

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From the above findings, researcher concludes and summarized as follows.

- (1) The variables on job involvement namely, I involve myself to deal very effectively with the problems of my students and I regularly spend time to keep abreast of current developments. The job involvement can be increased when the above variables are addressed.
- (2) The variables on OSI namely, Feeling pressure to compete with my colleagues and Receiving inadequate salary to meet financial needs gives stress can be reduced when the above variables are addressed.
- (3) The variables in job satisfaction namely I am satisfied with the pay and benefits and I am encouraged to progress in my career job satisfaction can be increased when the above variables are addressed.
- (4) Thus, bringing a sense of high job satisfaction among the teaching faculty would result in a positive attitude towards the teaching profession.

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M. Valan Rajkumar, Ph.D.
 Professor
 Department of Electrical & Electronics Engineering
 Gnanamani College of Technology
 Namakkal-637 018
 Tamilnadu
 India
valanrajkumar@gmail.com

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R. Ilangovan, Ph.D.
Professor
Department of Civil Engineering
University College of Engineering
Dindigul-624622
Tamilnadu
India
ilango1968@gmail.com

A. Velanganni Joseph, Ph.D.
Chaireperson, i/c.
Department of Youth Welfare Studies
Madurai Kamaraj University
Madurai-625021
Tamilnadu
India
dravjoseph@rediffmail.com

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**Consumer Brand Preference and Switching Behavior in
Cellular Service Industry – Madurai District**

**Vasundhara, S., Research Scholar
Prof. Dr. C. Swarnalatha**

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Abstract

The fastest growing service industry in India is the cellular service industry which made has far-reaching changes in the global recognition of the overall economic development of the nation. The present researches were conducted to understand the brand preference and switching behavior of customers in Madurai district. A sample of 110 cellular service users was interviewed through structured interview schedule by considering the variables on the demographic profile, brand preference towards the services offered by the cellular operators, and factor affecting the switching behavior of the customers. The tools used for analysis is “regression analysis”. The study inferred that brand preference has attracted customers on their network coverage, offers, and availability wherein the demographic profile of age and occupation of the respondents has also influenced in brand preference. Where it comes to switching behavior only the service patterns of the cellular service providers on offers and availability has influenced more.

Key Words: Brand Preference, Switching behavior, Cellular service industry, Regression analysis

Introduction

The Indian telecom industry has experienced huge changes since its liberalization in the 1990's. India's subscriber base has rushed forward over the years to a size that's more than triple. India is the second biggest in the total number of cellular service utilizations.

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Consumer Brand Preference and Switching Behavior in Cellular Service Industry – Madurai
District

The number of telephone subscribers in India increased from 1,002.05 million at the end of May-15 to 1,006.96 million at the end of June- 15. This shows a monthly growth rate of 0.49 % - TRAI (2015) [13]. The cellular service industry has enhanced the affordability of cellular service at affordable rates and tariffs to the customers’.

As there are more options for selecting the cellular operators, the customers now have the choice to choose their preferred operator and switch from one operator to another. This has made the cellular sector more competitive than any other service sector in India. The aim of this study is to understand the brand preference and switching behavior of consumer in selecting the cellular operator in Madurai District.

Highlights of Telecom Subscription Data as on 30th June, 2015

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	980.81	26.15	1006.96
Net Addition in June, 2015 (Million)	5.02	-0.12	4.91
Monthly Growth Rate	0.51%	-0.44%	0.49%
Urban Telephone Subscribers (Million)	562.95	21.25	584.21
Net Addition in June, 2015 (Million)	4.12	-0.07	4.05
Monthly Growth Rate	0.74%	-0.32%	0.70%
Rural Telephone Subscribers (Million)	417.85	4.90	422.75
Net Addition in June, 2015 (Million)	0.90	-0.05	0.85
Monthly Growth Rate	0.22%	-0.97%	0.20%
Overall Tele-density*	77.90	2.08	79.98
Urban Tele-density*	144.25	5.45	149.70
Rural Tele-density*	48.10	0.56	48.66
Share of Urban Subscribers	57.40%	81.27%	58.02%
Share of Rural Subscribers	42.60%	18.73%	41.98%
Broadband Subscribers (Million)	93.15	15.70	108.85

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Consumer Brand Preference and Switching Behavior in Cellular Service Industry – Madurai District

Brand does not exist for the sake of identification and differentiation. They exist because for-and-of customers - Harsh V Verma (2002) [1]. Brand preference is a unique term and it is fundamentally framed with more than one part. The Indian telecommunication sector has an overdose of brand service providers. The foremost step of customer's brand preference is to understand the customer choice. Even if the services are same the component of branding is differentiated in introducing them - Ramulu Bhukya (2013) [8]. To make the product different from another product branding has the greater advantage in an organization which is obvious. If the cellular industry identifies the brand preference of the customers, then it would be simple for the industry to build a long term relationship.

The customer's faces huge options to actually reach their satisfaction in choosing the brand - Harsh V Varma (2002) [1]. They also have to be attracted and they should experience the strength of service offered by the cellular operator. The most difficult job for the present day for network providers is to hold their customers. The service provider has to hold the existing consumer than attracting new ones. Consumer behavior is a process where they select utilize and discard the products, services, knowledge, or thoughts to fulfill their needs. Switching behavior of customers can be expressed as the process of being loyal to the current service provider and switching to another service provider, due to dissatisfaction or any other problem. Even if the customers are loyal to a particular brand, if the brand does not satisfy the customers' needs, the consumer switches to a competitor brand - Kumaresh (2012) [6]. The Switching behavior has to be considered as a prime factor for the growth of the cellular. The reasons may differ from one customer to another on their switching of service but the operators have to attract more customers than targeting on the new customer to existing one.

Literature Review

Brand Preference and Switching Behavior

The cellular service provider should mainly focus on the network coverage to retain their customer and also to increase their market shares concludes Debarati and Ishita (2010) [2].

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Mobile phone service providers have to recognize the changing preferences and the behavior of customer's curiosity in order to serve them better and satisfy them. As there is heavy competition in the cellular industry it is important for a cellular service provider to keep an eye on customer's preference and behavior to capture the market concludes Rajpurohit and Vasita (2011) [3]

The choice of a mobile operator brand was more dependent on its key attribute of network coverage than any other attributes concludes Anthony and Francis (2011) [4].

As there are more options in selecting the cellular service operator's unsatisfied customers tend to switch easily concludes Krishnamurthy and Varalakshmi (2011)[5].

Most of the respondents in this study stated that there are poor network coverage and no promotion and offers as their major problem is their past service providers concludes Kumaresh and Sekar (2012) [6].

The cellular operator has to give importance to network coverage and tariff plans with excellent customer service providing with good promotional offers to satisfy the customers which will constitute brand loyalty which leads to brand preference concludes Ramulu and Sapna (2013) [8]

If there is high brand loyalty then there will be fewer customers on brand switching also the cellular industry have to create appropriate strategies to focus on the needs, wants and expectations of the customers suggests Sarwat Afzal (2013)[7]

Value added services and pricing strategies are the major two influencing factors for the consumer behavior while switching the brands in the telecommunication industry concludes Khushboo, Nidhi and Swaranajeet (2014) [9]

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Awareness of services should be needed for all age group. The intention of switching behavior of customers from one service provider to another are very low concludes Sana (2014) [10].

Network coverage has much impact on switching intention because all the cellular companies are not providing the almost same level of network coverage concludes Zahra Zahid (2015) [11].

Companies can recognize the available strategies and tools for retaining the customer suggests Zeeshan (2015) [12].

Objectives of the Study

- To evaluate the brand preference and switching behavior from different possible demographics.
- To know the brand preference towards the services offered by the cellular operator.
- To find the factors influencing the switching behavior of the customers.

Hypotheses

H0: There is no significant association between age and brand preference.

H1: There is a significant association between age and brand preference.

H0: There is no significant association between occupation and brand preference.

H1: There is a significant association between occupation and brand preference.

Research Methodology

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Consumer Brand Preference and Switching Behavior in Cellular Service Industry – Madurai District

Research Design	Descriptive Research
Data Collection	Primary Data: A personally designed structured questionnaires were used for data collection. Secondary Data: Literature reviews, books, and articles.
Sampling	Convenience sampling techniques were used.
Tools for Data Analysis	Regression analysis and Test of Association
Number of Samples	105

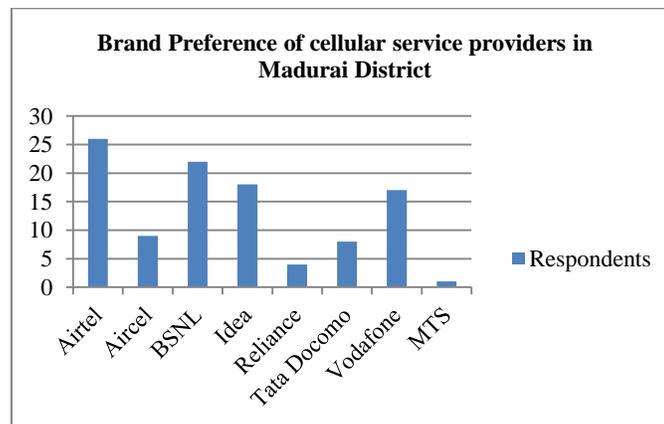
Data Analysis

The Data Output has been inferred through APA Format.

Brand Preference on Cellular Service Providers in Madurai District

Figure I

Showing the brand preference of cellular service providers in Madurai District



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Consumer Brand Preference and Switching Behavior in Cellular Service Industry – Madurai District

From Figure I we can get a clear picture of the brand preference of customers in Madurai district. Where Airtel stands first preference with 26 respondents and BSNL in second with 22 respondents followed by Idea with 18 respondents and Vodafone at fourth place with 17 respondents followed by Tata DoCoMo is preferred by 8 respondents and Reliance with 4 respondents and last comes the MTS operator.

Test of association between brand preference and age group

Since more than 20% of the expected counts are less than 5, the likelihood ratio is used instead of chi-square.

TABLE I

Test of Association between Brand Preference and Age Group

Variable	n	Brand preference Variable				Likelihood ratio	Sig.
		Network coverage	Offers	Customer care Service	Availability		
AGE						26.396	P<.000
Below 20	54	30	8	6	10		
21-30	28	9	5	8	6		
Above 30	23	2	2	5	14		
Total	105	41	15	19	30		

Inference: Table I to investigate whether age and the reasons for brand preference are associated or not, a chi-square statistic was used. Since more than 20% of the expected counts are less than 5, The likelihood ratio is considered instead of chi-square. Likelihood ratio = 26.396, DF=6, N=105, $p < .001$. So the null hypothesis is rejected in favor of the alternative hypothesis. Hence, there is a significant association between age group and brand preference of the respondents. From the above table, it can be inferred that cellular service users aged below 20 are more likely than expected to prefer the brand due to *Network coverage and offer* than the other groups. Cellular service operator users aged between 21 to 30 are more likely than expected to prefer the brand due to *customer care service* than the other groups. Cellular service users aged above 40 are more likely than expected to prefer the brand due to *availability* than the other groups.

Test of Association between Brand Preference and Occupation

TABLE II

Test of Association between Brand Preference and occupation

Variable	n	Brand preference Variable				Chi-square	Sig.
		Offers	Availability	Network Coverage	Customer Care Service		
OCCUPATIO N						18.991	P< .01
Student	38	20	7	5	6		
Government Employee	45	16	11	13	5		
Private Employee	22	13	3	2	4		
Total	105	49	21	20	15		

Inference: Table II to investigate whether occupation and the reasons for brand preference are associated or not, a chi-square statistic was used. Since more than 20% of the expected counts

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are less than 5, the likelihood ratio is considered instead of chi-square. Likelihood ratio = 18.991, DF=6, N=105, $p < .001$. So the null hypothesis is rejected in favor of the alternative hypothesis. Hence, there is a significant association between occupation and brand preference of the respondents. From the above table, it can be inferred that *students and private employers* are more likely than expected to prefer the brand due to *offers* than the other groups. *Government employers* are more likely and expected to prefer *network coverage* than the other groups.

Regression Analysis

Simultaneous multiple regression analysis summaries for Brand Preference on the pattern of service offered by the cellular industry. Where N=105

Coefficients

Test of Association between Brand Preference with Dependent Variable and Independent Variable

Table showing brand preference as the dependent variable and network coverage offer availability and customer care service as the independent variable.

TABLE III
Test of Association between Brand Preference with dependent variable and independent variable

Variables	Unstandardized Coefficients B	Standard error	Standardized Coefficients Beta
Constant	-1.254	0.228	
Offers	0.335	0.101	0.260**
Availability	0.351	0.137	0.249*
Network Coverage	0.414	0.107	0.310**
Customer care Service	0.056	0.113	0.041

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Note $R^2=0.789$; $F(4,100)=93.67$, $p < 0.001$, $p < 0.001$ * $p < 0.05$ ** $p < 0.01$

Inference: TABLE III showing the multiple regressions were conducted to determine the best linear combination of Offers, Availability, Network coverage and Customer care service for predicting Brand preference scores. This combination of variables significantly predicted Brand preference, $F(4,100)=93.67$, $p < 0.001$, with all variables except Customer care service significantly contributing to the prediction. So the null hypothesis is rejected in favor of the alternative hypothesis. Hence independent variables significantly influence the dependent variable Brand preference. The beta weights, presented in Table 3, suggest that Network coverage contributes most for predicting Brand preference, which is followed by Offers and Availability. The adjusted R^2 value was 0.789. This indicates that 78% of the variance in Brand preference was explained by the model. According to Cohen (1988), this is a large effect. The unstandardized coefficients indicate the increase independent variable for a one-unit increase in the independent variable. The regression model, constructed with unstandardized coefficients is given below.

Brand preference = $-1.254 + 0.335$ (offers) + 0.351 (Availability) + 0.414 (Network Coverage)

Test of Association between Switching Behavior with Dependent Variable and Independent Variable

Table showing switching behavior as the dependent variable and network coverage offer availability and customer care service as the independent variable.

TABLE IV

Test of Association between switching behavior with dependent variable and independent variable

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Variables	Unstandardized Coefficients B	Standard error	Standardized Coefficients Beta
Constant	-1.013	0.248	
Availability	0.297	0.107	0.231**
Network Coverage	0.312	0.122	0.220*
Offers	0.368	0.095	0.276**
Customer care service	0.053	0.100	0.036

Note $R^2=0.742$; $F(4,100) = 89.45$, $p < 0.001$, $p < 0.001$ * $p < 0.05$ ** $p < 0.01$

Inference: TABLE IV showing the multiple regressions were conducted to determine the best linear combination of Availability, Network coverage, Offers, and Customer care service for predicting switching behavior scores. This combination of variables significantly predicted switching behavior, $F(4,100) = 89.45$, $p < 0.001$, with all variables except Customer care service significantly contributing to the prediction. So the null hypothesis is rejected in favor of the alternative hypothesis. Hence independent variables significantly influence the dependent variable switching behavior. The beta weights, presented in Table 4, suggest that offers contribute most for predicting switching behavior which is followed by network coverage and availability. The adjusted R^2 value was 0.742. This indicates that 74% of the variance in switching behavior was explained by the model. According to Cohen (1988), this is a large effect. The unstandardized coefficients indicate the increase independent variable for a one-unit increase in the independent variable. The regression model, constructed with unstandardized coefficients is given below.

Switching behavior = $-1.1.013 + 0.297$ (Availability) + 0.312 (Network coverage) + 0.368 (offer)

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Conclusion

It is inferred from the study that customers have plenty of decisions in choosing their brand and services cellular service providers as there are more than six operators in Madurai district. The study was conducted to know the various factors in finding the brand preference on network coverage, availability, offers, and customer care service.

Findings on Brand Preference with Age of the Respondents

Network coverage and offers are mostly preferred by the by age group below 20 years of respondents and age group of 21-30 of respondents. Availability is the mostly preferred by age group above 30. Yet at the same time, customer care service is less preferred by the respondents.

Findings on Brand Preference with Age of the Respondents

When occupation influence brand preference on services offered by the cellular operator, students, and private employees prefer their brand for the offer. Network coverage was preferred by government employees. When it comes to occupation customer care service has less influence with brand preference.

The Cellular service providers have to improve their customer care service for making their customers reaches and satisfy the services offered by them as there is heavy competition in the cellular service industry. It is also clear from the study that age and occupation play a significant role in selecting a cellular service provider. As brand preference exists in the minds of the customers and prospect.

Findings on brand Preference and Switching Behavior

Network coverage, offers, and availability are the major services for brand preference of the customers. When it comes to switching behavior customers switch from one service to another because of offer and availability provided by the service providers. It is with the belief

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that the service providers can retain their customers by providing them with their preferred services and support customers to stay with their current service provider.

But the cellular service provider face challenges in improving their service better day by day by providing the customers with more offers and services. At the same time, the customers are choosier in selecting their desired services and operator that satisfy their needs because uniformity in service and offers cannot be provided by the cellular operator. Nowadays customers are very much flexible in selecting their cellular operators as the operators provide the customers with low call rates, more offers, and affordability in services which make the customers choose two operators at the same time. The customers experience the services through two operators at the same time are satisfied with the brand preference and switching behavior.

We have a couple of restriction in the study but to get the right inference we can target more respondents to infer the exact information on brand preference and switching behavior. As the study can be extended to other services offered by the cellular industry with consideration of more respondents.

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Vasundhara, S.
Research Scholar
Department of Management Studies
Anna University Regional Campus
Madurai 625 019
Tamilnadu
India
s.vasundhara.s@gmail.com

Prof. Dr. C. Swarnalatha, MBA, M.Phil., Ph.D.
Professor & Head
Department of Management Studies
Anna University Regional Campus
Madurai 625 019
Tamilnadu
India
swarna@autmdu.ac.in

**Adversity Quotient[®]: A Universal Retention Strategy for
Nascent Organizations**

**Dr. Venkatesh J.
Ms. Shivaranjani G., Full Time Ph.D. Research Scholar**

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Abstract

Employee retention involves taking measures to encourage employees to remain in the organization for the maximum period as employees are valuable assets for every firm. Organizations have realized this ultimate truth and are on track to take initiatives to treat their employees as their most valuable assets. It is this unique workforce, which provides competitive advantage to any organization. If two organizations have same product lines using similar technology and are core competitors in a particular product manufacturing what basically differentiates them is their unique workforce. An organization having a stable and productive workforce becomes successful in building their competitive advantage and organizational efficiency. So, the essence lies in recruitment and selection of potential candidates and building employees who possess excellent resilience to outshine from others. This paper aims to narrate the need for resilience in employees which can be measured through Adversity Quotient Profiling[®] and by creating awareness on individuals Adversity Quotient[®] Scores.

Keywords: Adversity, Adversity Quotient[®], Retention, Employees, Strategy.

Introduction

Employee retention refers to the ability of an organization to retain its employees. As relating to the efforts by which employers attempt to retain employees in their workforce. In a sense, retention becomes the strategies rather than the outcome. Employee retention should be on

every company's radar as creating effective employee retention strategies can go far toward helping one's business meet its goals.

The employees want to know they are being treated fairly and receiving the highest compensation possible and also want to see that they are appreciated by their employers. Small businesses can cultivate a positive workplace by developing engaging new hire orientation programs. Businesses can work on creating above average compensation and benefits packages. Strategies need to be in place to ensure successful communication and to build teamwork among employees as businesses that work toward these goals will likely experience higher employee retention rates than those that do not.

Nine Commonly Used Employee Retention Strategies

1.1 Hire Right People: Taking the time to find the right person, someone who is not just technically capable but also a good fit for the company is important. Companies that are successful in hiring have a process that includes attracting high quality candidates, evaluating them in several different areas, and taking the time to get to know the people in different ways.

1.2 Employee Empowerment: Is giving employees a certain degree of autonomy and responsibility for decision-making regarding their specific organizational tasks. It allows decisions to be made at the lower levels of an organization where employees have a unique view of the issues and problems facing the organization at a certain level.

1.3 Employee being the most valuable asset: Business leaders who adopt the attitude that anyone is replaceable, thinking they can simply hire someone with a greater skill set or someone with a more prestigious pedigree, are fooling themselves. When a company has a truly great employee, that employee carries value that simply cannot be replaced. They carry deep institutional knowledge of the organizations as they have extensive product, systems, and process knowledge. Also they hold client relationships that have been built over many years and carry tremendous experience on what has worked and what hasn't worked for the company in the past.

- 1.4 Believe in your Employees:** Trust is often talked about as the bedrock of a company's success. Most people think about the issue in terms of customers as they have to believe in you and your products and services. But trust within the organization is just as important as your employees must believe in each other. When they don't, communication, teamwork and performance inevitably suffer.
- 1.5 Provide them Information and Knowledge:** The availability, timeliness and accuracy of knowledge is the key to their level of engagement. When employees feel connected by and have the information and knowledge they need to immediately learn or begin doing their job, a higher level of engagement is set from the start.
- 1.6 Feedback on their performance:** If it's done thoughtfully, usefully and with the best of intentions it will help improve the quality of that person's work and may even boost their productivity.
- 1.7 Recognize and appreciate:** Recognition serves as a tool for reinforcing the behaviors that drive an organization to excellence and gives a vital boost to employees also recognition helps in creating an environment where individuals feel appreciated for their contributions and their accomplishments and builds a culture that attracts and retains the best talent.
- 1.8 Keep their morale high:** Employee morale can quickly build or break a company's success so effective leaders often keep a close eye on it and enlist simple and creative approaches to strengthen it.
- 1.9 Create a healthy environment:** It is one that is safe, empowering and satisfying with a supportive team to perform with a sense of professionalism, accountability, transparency, involvement, efficiency, and effectiveness.

Various studies conducted indicate that everyone is contributing to the prevailing attrition and it does not happen for one or two reasons. Organizations must develop its own sensing device to know whether it is the internal or external factor that is causing the attrition. Employee attrition is a costly dilemma for all organizations. In today's taxing business climate, managing company's competent and skilled human capital is vital for its success. The extent of the impact

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of attrition on an organization cannot be fully understood if there is no attempt to quantify the costs. The more complex approaches to costing turnover give a more accurate and higher estimate of the costs. When a competent employee is to be replaced an organization incurs a variety of costs including those related to recruiting, selection, training and suboptimal performance while learning the job and companies usually turn to increasing the compensation for employees to retain them. Employee attrition costs 12 to 18 months salary for each leaving manager or professional. In the current scenario, where every organization wants to be at its competitive best, high attrition rate can really act as a threat to success. Attrition is a very serious challenge especially to rapidly growing organizations. Before it explodes, the organizations should seriously workout strategies to reduce the turnover so that the organizations should not suffer and its planning for the future should be giving close attention to why attrition is occurring in the present.

Background of the Study

Paul and Athisayam (2014) conducted a conceptual study on impact of organization culture on employee retention at Tata Steel, Coimbatore. Culture is the environment that surrounds employees at work. Authors indicated that culture that is aligned with the strategies of industries can lead to employee retention. Employee reward programs, career development programs, performance based bonus, loyalty bonus, quality of work life etc are few tools of employee retention. Gaffney (2005) in her study indicated that career development programmes are critical in retaining employees.

Author stated that the retention research indicated that individuals tend to stay with their organizations longer, where they are experiencing personal and professional growth. Taplin et al (2003) researchers have found that rewards as provided by organizations have relationship with job satisfaction and hence employee retention. Kickul (2001) investigated the role of psychological contract in retention of employees in small businesses. Results indicated that breach of psychological contract has an impact on commitment and intention to leave the organization. Employee may perceive that he has been promised competitive wages, promotional

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opportunities, job training, challenging and meaningful work etc. When these expectations are not met, employees may have tendency to leave the organization. Lineberry and Trumble (2000) in their study assessed that the role of benefits in enhancing employee commitment. Study showed that benefits program is crucial in attracting and retaining employees and driving employee commitment. Study showed that most important driver of commitment is manager's recognition of an employee's personal and family life.

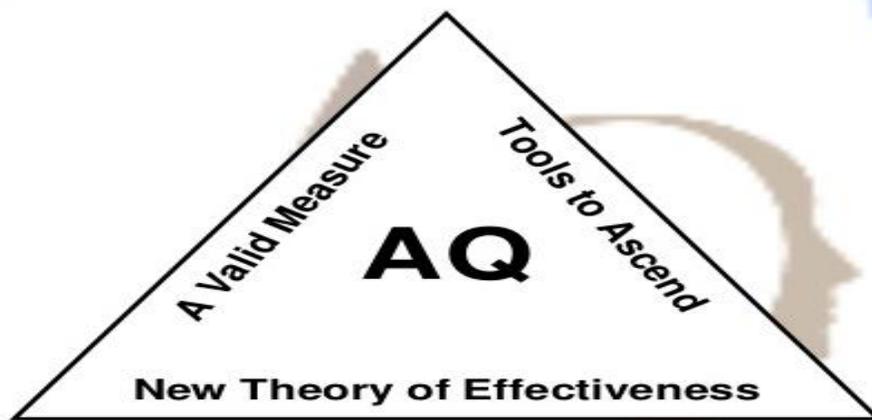
Benefits programs which take this factor into account combined with traditional benefits plans such as medical plans and pension plans will make the companies competitive in meeting the needs of their workforce. According to Pomeroy and Lyon (2000) attraction and retention of employees is a key concern.

Key instrument in attracting and retaining employees is compensation surveys. A properly designed survey can provide important benchmark of competitive pay rates, commission and incentive plans. Rust et al (1996) conducted a study about employee satisfaction and retention of frontline employees. Authors argued that employee turnover is highest among employees who are not satisfied with their jobs. Qualified employees are becoming scarce and difficult to retain, organizations need to focus on improving employee satisfaction. For that organizations need to view workers as customers. Authors believe that first step in the process of increasing employee retention is often the administration of satisfaction survey that seeks to measure perceptions.

Adversity Quotient

Adversity Quotient[®] or AQ[®] is the science of human resilience, people who successfully apply AQ[®] perform optimally in the face of adversity the challenges big and small that confront us each day. Dr. Paul Stoltz, has introduced the concept of Adversity Quotient. According to him, AQ[®] is the ability to handle adverse situations which measures a person's ability to prevail in face of adversity and this AQ[®] can be increased thereby giving a permanent boost for your ability to survive in crisis and finally succeed.

Figure 1: Depicts the Adversity Quotient® Definition



Source: Peak Learning Inc., USA.

Adversity Quotient encompasses four dimensions CO2RE which exactly measures the AQ® of an individual. In the Present day say Intelligence Quotient (IQ), measurement of raw intelligence and Emotional Quotient (EQ), measurement of emotional intelligence, tools used to judge the success of individuals are outdated now and today the new predictor of success is Adversity Quotient®.

The present day high velocity economy with its increasing uncertainty and complexity of jobs, requires employees who can thrive in the face of adversity. While adversity can take any form and magnitude, from major tragedies to minor annoyances, adversity quotient is a measure of how an individual perceives and deals with challenges. Individuals with high AQ® levels take greater responsibility to fix problems and do not blame others for their setbacks. They feel that the problems they face are limited in scope and can be dealt with quickly and effectively. Those who can't handle adversity can become easily overwhelmed and emotional, then pull back and stop trying and turn out to be losers.

Procedure to use AQ® Tool in Organizations

Organizations can effectively hire the best talent pool by using Adversity Quotient tools and its measures as it elaborates from (figure 2 to figure 6) how individuals can get to know their

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respective individual scores on AQ[®] and how they can improve to increase their performance at their work place. The first level aims to take up an online Adversity Response Profile[®] test to know individuals AQ[®] Score, second level aims at bringing about an awareness of the CORE dimensions, third level uses the LEAD sequence as its strategy and finally the Action funnel so as focus on the action you are most compelled to take in the face of adversity.

Figure 2: Adversity Response Profile[®] Sheet to know individual's AQ[®] Score

Adversity Response Profile

C	O	R	E
1. ___	2. ___	3. ___	4. ___
7. ___	6. ___	5. ___	8. ___
13. ___	11. ___	9. ___	10. ___
15. ___	16. ___	12. ___	14. ___
17. ___	18. ___	20. ___	19. ___

Total C = ___ Total O = ___ Total R = ___ Total E = ___

Total C+O+R+E x 2 = ARP Score = _____

Adobe Acrobat 7.0 Document

Source: Peak Learning Inc., USA.

The AQ[®] variables are control, origin and ownership, reach, and endurance embodied in the acronym CO2RE. C stands for control over an adverse event. People who respond to adversity as temporary, external and limited have optimistic explanatory styles and tend to enjoy life's benefits. With perceived control, hope and action are turned to reality or learned helplessness shall pass. The more control one has, the more likely one has to take positive action. O2 denotes origin and ownership. The first O stands for origin and has something to do with blame. Blame has two functions which help one to learn from and adjust behavior causing improvement. This blame leads to guilt obliging one to search own soul and weigh the way one might have hurt others. The feeling of guilt is a powerful motivator when used properly for it can help heal real, perceived or potential damaged to an important relationship. Too much blame can be demoralizing and destructive which can destroy ones energy, hope, self worth and immune system leading one to decide to quit. It is indicative of the level to which one or an external entity is the origin of the event, and to what degree one owns the outcomes. Those with

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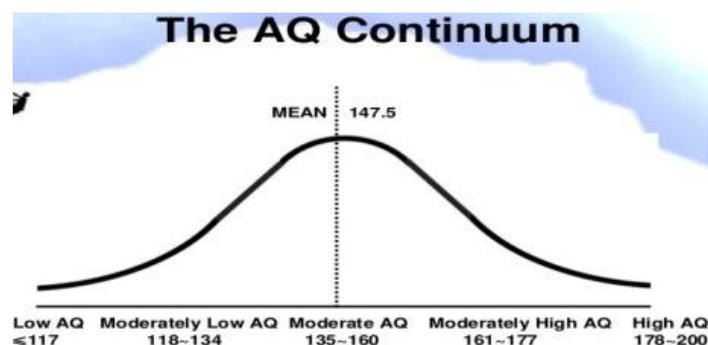
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lower AQ[®] scores tend to blame themselves. Higher scores tend to properly place responsibility, and therefore also have high self-worth.

An individual having low AQ[®] blame oneself for bad events, but with higher AQ[®] an individual learn one's behavior to become smarter, better and more effective the next time similar situation is encountered. The other O means ownership that reflects accountability. This answers the degree of owning the outcomes of adversity whether good or bad. High AQ[®] people enhance their accountability to control, empower and motivate action while low AQ[®] people disown the problem causing failure to act, give-up, point fingers, reduced performance and angers at others and many more negative actions.

Owning the outcome reflects accountability for achieving a specific result in response to a problem. High scores tend to accept responsibility for creating a specific outcome regardless of the causes. R stands for reach evaluating how far the adversity gets into the areas of one's life. Low AQ[®] response allow adversity to affect other aspect of one's life leading to financial panic, sleeplessness, bitterness, distancing self from others and poor decision making. But with high R-score one may limit the reach of the problem to the event at hand.

Figure 3: Represents the Adversity Quotient[®] Standard Bell Curve



Source: Peak Learning Inc., USA.

AQ[®] scores range from 40 to 200, with a global mean of 147.5. When measured, most groups reflect a fairly broad range of two or more standard deviations in either direction from the mean, as well as a standard bell curve distribution of AQ[®] scores. The AQ[®] means vary from group to group based on occupation and industry. A general finding is that those in what are stereotypically the adversity rich occupations tend to have the highest average AQ[®]s. Conversely, groups in the most stable occupations often score below the global mean, validating the notion that people tend to select occupations based on their AQ[®]. The AQ Profile[®] has been tested extensively and shows no age, gender, or ethnicity bias. It is the most robust instrument in existence for measuring resilience.

Figure 4: Depicts a Self Explanatory AQ[®] CORE Dimensions

AQ CORE Dimensions		
Dimension	What it is...	What it determines...
Control	The extent to which someone perceives they can influence whatever happens next	Resilience, health, and tenacity
Ownership	The likelihood that someone will actually do anything to improve the situation, regardless of their formal responsibilities	Accountability, responsibility, action, and engagement
Reach	The extent to which someone perceives an adversity will "reach into" and affect other aspects of the situation or beyond	Burden, stress, energy, and effort; it tends to have cumulative effect
Endurance	The length of time the individual perceives the situation / adversity will last, or endure	Hope, optimism, and willingness to persevere

Source: Peak Learning Inc., USA.

The above table depicts the following:

- Control: How much control do you have over the adversity?
- Origin: Who or what is the origin of the adversity?
- Ownership: What part to I have in the adverse situation?
- Reach: How far will the adversity reach to other aspects of my life?
- Endurance: How long will the adversity last?

Figure 5: Describes the AQ[®] LEAD Sequence



Source: Peak Learning Inc., USA.

AQ[®] is the foundational factor of success that can determine the ‘how’, ‘if’, and ‘to what’ degree of attitudes, abilities and performance are manifested by a person. The adversity quotient of an individual plays an ever greater role in reacting to adversities being dealt with greater uncertainty, demands, challenges, changes and complication. So it is essential that the employees learn to rewire, raise and strengthen their AQ[®] Scores to combat attrition.

Figure 6: Represents the AQ[®] Action Funnel



Source: Peak Learning Inc., USA.

The AQ Profile[®] has been tested across respondents from 51 countries and has demonstrated strong universality and applicability across cultures. AQ[®] scores are presently available from a diverse sample of 500,000 employees and students in 37 different companies and educational institutions worldwide. The distribution of their AQ scores provides norms

against which anyone taking the AQ Profile[®] can compare his or her score. The AQ Profile[®] is normative, meaning higher scores are generally superior, reflecting greater overall resilience and effectiveness.

Conclusion

The factual judgment is the more resilient one becomes the more constructively and effectively he can respond to and work through life's difficulties as he is not easily dragged down by tough situations. Employees have to take up the AQ[®] test to realize their scores and it will tell a lot about themselves which they may have not known as it provides with a transparent feedback and helps them to realize about themselves as how they respond to adverse situations which is building pressure and stress in dealing with real life situations and if it is left unchecked these patterns of poor responses will remain with them for life time so one has to seek honest and positive feedback and rectify your fixed response patterns. Hence to conclude, AQ[®] tool is a self-defending retention tool to retain employees by building employee resilience as this scientific AQ[®] tool can change employees thought process, change the dimensions of dealing with work life problems by attaining success, prosperity and stress free healthy life style. When used properly AQ[®] is a vital piece of any effort to strengthen employees and their ability to thrive in today's challenging work environment lucratively.

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Dr. Venkatesh J.
Associate Professor
Department of Management Studies
Anna University Regional Campus
Coimbatore Tamilnadu
India

Ms. Shivaranjani G.
Full Time Ph.D. Research Scholar
Department of Management Studies
Anna University Regional Campus
Coimbatore Tamilnadu
India

Cyber Ethics in Virtual Organizations

M. Vignesh, M.Sc., MBA and A.P. Arul Jeevaraj, M.Sc., MBA

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Abstract

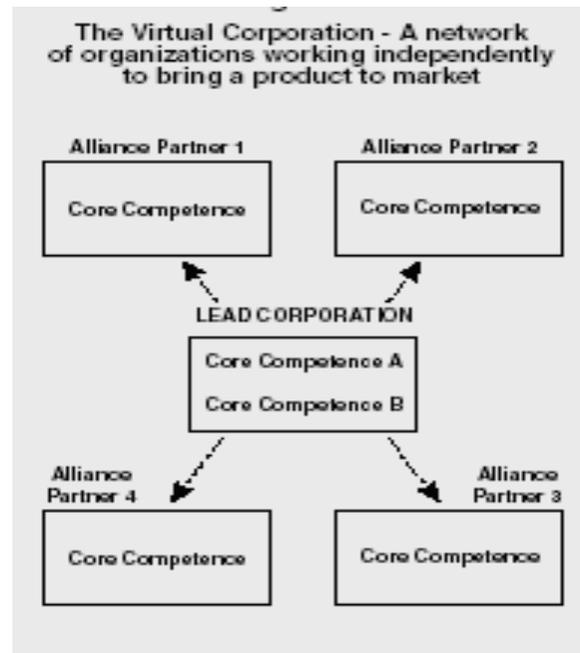
“Nothing is permanent, except change”, says an adage. The great digital divide has shrunken the businesses and organization in the global arena. Gone are those days where the organisations of brick-and-mortar played a dominant role, it’s the turn of digital or virtual organisations wherein the physical infrastructures are impasse. Now this is the era, where organizations are run by virtual team, virtual project and virtual communication. Many of us may raise their eye brows, whether is it possible to maintain ethics in an unstructured organization. Whatever and wherever might be the organization, the ethics remain to be the same.

Key Words: Virtual Organizations, Market Opportunity

Introduction

Virtual organizations are almost ephemeral, where their function is being temporarily associated with a service. It can be associated with virtual office, virtual teams, virtual leadership and of course virtual conduct. According to Hertel et al., virtual teams are work groups with members collaborating from geographically distant locations, using the electronic communication media, and reflecting recent trends of globalization and interdependent team work. Such organizations are formed by triggering of specific market opportunity.

Figure 1. A typical virtual organization formed by group of individual firms.



(Adapted from the Ray Grenier and George Metes model for a virtual organization)

The Lacunae of Virtual Organizations

1. Virtual organizations are time-specific in their operations.
2. They are mostly decentralized.
3. No line and staff principle. So misuse of authority and responsibility.
4. needs heavy investment and brings delayed ROI.
5. The way of strategic planning is unclear as there is no clearly defined organizational hierarchy and roles.
6. Hence co-ordination among the team members is not that much good, even though the team members are linked by communication technologies.
7. No face-to-face communication among the members.
8. may create ambiguous role among the employees
9. May cause a loss of control among the entire organization.

10. It is subjected to high flexible environment based on the demands and requirements of the customers and suppliers.

Common Sins in Virtual Organizations

The cyber-crimes which are associated with the traditional corporates are common in virtual organizations tool. Cranford (1996) opined that, virtual communications, protected by computers and miles of distance, can create a tendency for more aggressive and disrespectful behaviour. In this era of IT, there are number of sins we are committing, of which are discussed here:

- i) **Data theft and data manipulation:** This accounts for 85 % of cyber-crime. It is linked with the hacking mechanism, wherein a illegal intrusion of a system or database is done and precious data can be stolen or misused. This type of fraudulent activity is prevalent in BPOs and other back-office operation.
- ii) **Eavesdropping:** This is the practice of following and watching a person's action through cyber by his chatting, mailing, typing or keystrokes.
- iii) **Phishing:** commonly called as the Nigerian scam or 514 scam, as it was first identified to be operated from Nigeria. This includes sending a false mail or baiting a person to lure his personal details as bank account details, PIN number, credit card details etc.,

These are some major sins that can be done by the aid of human brain along with the technological inventions. However, these threats are not an exhaustive collection.

Relevance of Ethical Theories to Cyber Ethics

- 1) **Deontological (duty-based) ethics:** It deals with doing duty in a full morality. The consequences of such ethics can be listed as,
 - Do the right thing.
 - Do it because it's the right thing to do.

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M. Vignesh, M.Sc., MBA and A.P. Arul Jeevaraj, M.Sc., MBA

Cyber Ethics in Virtual Organizations

- Don't do wrong things.
- Avoid them because they are wrong.

This duty-based ethics can be performed in virtual organizations as not to steal or misuse confidential customer data, not to indulge in electronic money transactions and last but not the least as perseverance of cyber ethics.

2) The Categorical Imperative of Kantian Ethics

As per the categorical imperative, Kant emphasized the treating of humans as valuable and none should go wrong.

3) Virtue Ethics

The concept of virtue ethics is applicable to international business, where it deals with the morality of the people involved across the transnational borders. According to Flynn, it appeals to those who wish the “right thing” to be done consistently. Different studies were also applied for the international business by Hartman.

Some of the ethical values were defined by the Computer Ethics Institute which are narrated as follows:

1. Thou shalt not use a computer to harm other people.
2. Thou shalt not interfere with other people's computer work.
3. Thou shalt not snoop around in other people's computer files.
4. Thou shalt not use a computer to steal.
5. Thou shalt not use a computer to bear false witness.
6. Thou shalt not copy or use proprietary software for which you have not paid.
7. Thou shalt not use other people's computer resources without authorization or proper compensation.
8. Thou shalt not appropriate other people's intellectual output.

9. Thou shalt think about the social consequences of the program you are writing or the system you are designing.

10. Thou shalt always use a computer in ways that ensure consideration and respect for your fellow humans (Computer Ethics Institute, 1992)

Richard O. Mason 1986 illustrated the ethical issues using an acronym PAPA – information privacy, accuracy, property and accessibility, where privacy is concerned with what information must be revealed to others and accuracy is related with the authenticity and fidelity of information while information property refers to the owner of the information and how information can be sold and exchanged, while accessibility focuses on how an information can be accessed.

Future of E-ethics

As Ford (2001) has clearly pointed out that, virtual communities can become real when they are affective for people and that the term virtual only demarcates the computer environment. Hence computers and information technology can be utilized as a supporting tool for our organizational setup and rest of the things are purely based on humane.

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M. Vignesh, M.Sc., MBA
Assistant Professor
American School of Business Administration
The American College
Madurai 625014
Tamilnadu
India
Vignesh.madurai@gmail.com

A. P. Arul Jeevaraj, M.Sc., MBA
(Research Scholar, Bharathiar University)
Assistant Professor
American School of Business Administration
The American College
Madurai 625014
Tamilnadu
India
aruljeevarajap@gmail.com

Need for Disaster Management in India

P. Vignesh, PG Scholar

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Abstract

Disaster management is important for minimized the loss or lives and economy. 'Disaster management can be defined as "The organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters"'.

Keywords: Post-Disaster Activities, Reconstruction Authorities, Disaster Management

Introduction

The simple term Disaster Management comprises the whole bunch of disaster-related activities. Some people think it just as a means of helping the people after the disaster. It is connected with the post-disaster activities done by the relief and reconstruction authorities. However, disaster management is beyond the post-disaster activities. It not only covers the post-disaster activities but is also linked to the pre-disaster activities.

Disaster Management

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters management.

Object of the Study

Often left unspecified and mostly assumed or taken for granted, an object of study is one of the most fundamental technologies of any investigative process. Drawing from the work of

Jorge Gonzalez, we approach an object of study as a socially constructed research tool that works best when explicit, transparent, and strategic.

A comprehensive object of study should organize at least nine components: Title, Area of Interest, Topic, Research Question, Practical Problem, Research Problem, Techniques, Information Produced, and Glossary. The complete object of study should manage a number of obligations required of any investigation.

Thus, an object of study frames a research question, articulates a claim, formulates co-generated information, facilitates techniques to co-produce knowledge, and proposes a system(s) of information. A successful object of study manages the epistemological, theoretical, and methodological contributions of the research.

Need of the Hour- Disaster Management



The Central Board of Secondary Education had introduced Disaster Management as a frontline curriculum for standard VIII from the academic year 2003 – 2004, IX from 2004 – 2005, and plan to introduce it in X in the next academic session. At that point it seemed nothing

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more than an additional burden to the already difficult curriculum. But in reality Disaster management training is not merely an academic subject but also an important life skill.

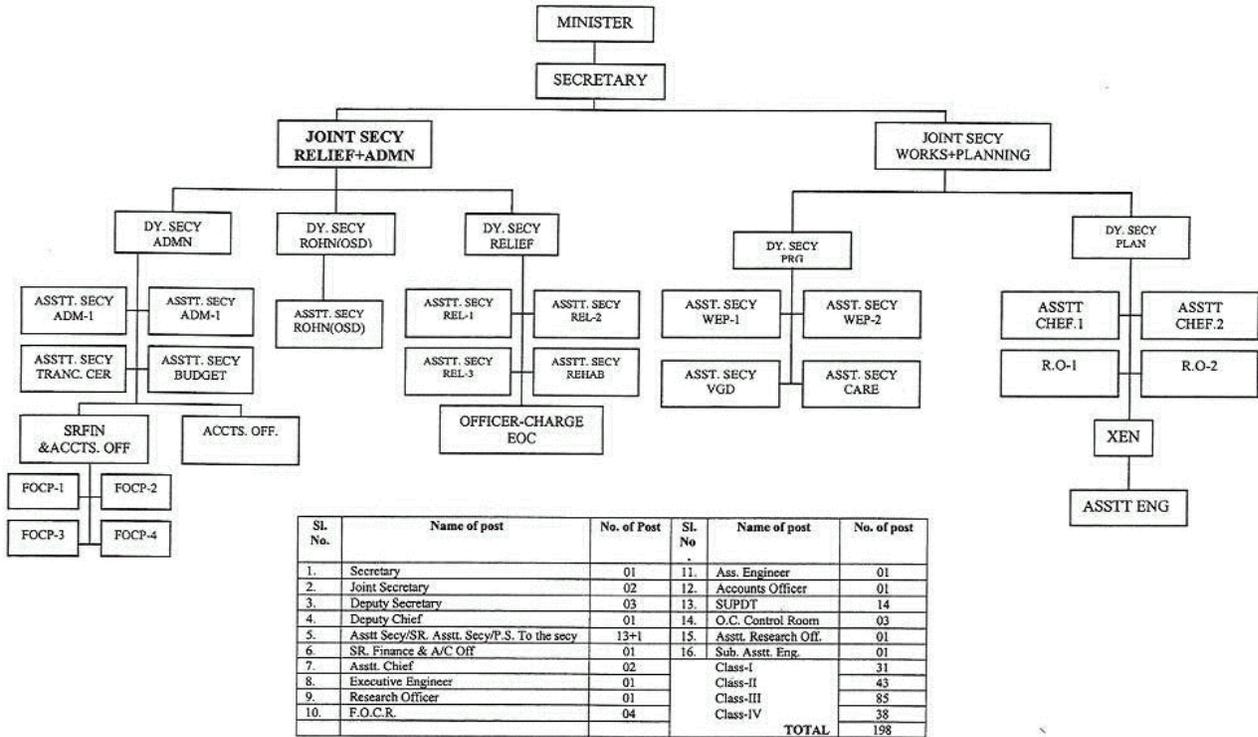
But Why to Introduce Disaster Management in Education?

India is prone to various hazards:

- 70% of the cultivable area is prone to droughts
- 60% to Earthquake
- 12% to Floods and
- 8% to Cyclones

Lessons learnt shows that no Government and no state can take up the challenge alone. 34% of the total population of the country is of the school going age. Comprehensive disaster management need of the hour, says expert 'Disaster mapping, land-use zoning are the techniques for disaster preparedness' 'Himalayan region and coastal zones are the most sensitive regions in India'

Thrissur: In the last two decades, India has experienced a number of devastating earthquakes. These disasters highlight an urgent need for putting in place a comprehensive disaster management.



Conclusion

Obtain support for the plan from senior management Form a committee and write the plan Update information as needed Obtain supplies, equipment and resources to support recovery efforts Test the plan periodically Outline the plan's activation Involve management and staff from every department, division or business housed in the facility While no disaster plan assures successful resumption of business operations, such a plan greatly tips the odds in favor of survival or recovery. Prior identification and protection of vital records, a clear plan for reconstruction and salvaging these records, and prior thought about the necessary steps to take after a disaster allows a department to end a crisis

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P. Vignesh, PG Scholar

Need for Disaster Management in India

P. Vignesh, PG Scholar
Department of Management Studies
Anna University Regional Campus
Madurai 625 019
Tamilnadu
India
Romanviki2015@gmail.com

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Need for Disaster Management in India

A Study on Safety Management

M. Vijay Lakshmi, PG Scholar

Abstract

The Indian society and economy have suffered human and financial losses as a result of the poor safety record in the construction industry. The purpose of this study is to examine safety management in the construction industry. The study will collect data from general contractors, who are involved in major types of construction. Collected data include information regarding organizational safety policy, safety training, safety meetings, safety equipment, safety inspections, safety incentives and penalties, workers' attitude towards safety, labor turnover rates and compliance with safety legislation. The study will also reveal several factors of poor safety management. Thus the paper will conclude by providing a set of recommendations and strategies to contractors for improving their safety performance.

Keywords: Safety, Management, Analysis, Construction, Industry.

Introduction

Up to the mid-nineties of the last century safety was improved only by a reactive “flycrash-fix-fly” approach. The focus of this approach was an intensive accident investigation followed by improving technology, operational procedures and advance training. The objective of the new approach is to avoid human injury, loss of life, and damage to the environment by using proactive Safety Management Systems (SMS) in the aviation industry. In addition to technical improvements the new focus is to contain and mitigate human error and organisational factors through regulation and training lessons were learned from incident investigations and other industries such as nuclear energy or space shuttle operation.

The ICAO determines principles and techniques of international air navigation and promotes the safe and standardised planning and development of international air transport. To achieve the goal of an acceptable level of safety in aviation operation, the Submissão de Trabalho Completo ICAO mandated that its 190 member states have to develop and implement Safety Management Systems. The purpose of the consequent Safety Management Manual (SMM; ICAO DOC 9859) is to support member states in fulfilling the requirements of the ICAO Annexes 6 (Operations), 11 (Air Traffic Services) and 14 (Aerodromes) with respect to the implementation of SMS by operators and service providers. ICAO's definition of Safety: "Safety is the state in which the possibility of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and safety risk management." (ICAO 2009, Chapter 2.2.4). In response to ICAO, the Federal Aviation Administration (FAA) introduced the advisory circular Introduction to Safety Management Systems for Air Operators (AC 120-92) and as well the European Aviation Safety Agency (EASA) provided the Notice of Proposed Amendment (NPA 22-2008) as legal basis. Hence, a SMS has to be implemented at all stakeholders in the Air Transport System (ATS) e.g. upcoming PartOPS for air operation (old designator was JAR OPS1), to achieve a super ordinate Target Level of Safety (TLS), as defined by Eurocontrol (ESARR4 2001).

Need for Safety Management

The construction industry has some special features which have a direct bearing on the accident potential. In this trade the pattern of work is ever changing. The operations and physical circumstances change constantly unlike in the factories where the process, the method and the operations are generally respective. Timings and schedules vary considerably from place to place. The most important changing factor the change of men themselves. The inherent nature of construction jobs combined with the above factors make this industry as one with accident risks.

The Safety Management System and Its Element

Safety management systems have six elements:

- A safety plan;

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- Policies, procedures and processes;
- Training and induction;
- Monitoring;
- Supervision; and
- Reporting.

Remember, it is not enough to simply adopt a satisfactory safety management system. You must also actively implement that system in your workplace. To do this, you must ensure that:

- Workers comply with procedures and instructions;
- Workers are appropriately trained; and
- Workers are subject to ongoing supervision.

1. Safety Plan

A safety plan is a strategic action plan that forms part of the business plan. It analyses the current and prospective risk for a company and charts how the risks will be eradicated and controlled over a calendar period (the safety plan must have a budget).

This plan will ensure that there is a governance structure within your company that ensures every worker clearly understands their safety obligations (and how to comply) and is accountable to carry out those obligations.

2. Policies, Procedures and Processes

Policies, procedures and processes include all safety paper infrastructures within your company. This paperwork will describe all safety behaviour, expectations, record-keeping, incident reporting, and incident notification documentation.

3. Training and Induction

Depending on the nature of your workplace (whether it is low-risk or high-risk), everyone who enters your workplace should receive training on:

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- the rules of your company;
- the rules of the site; and
- the rules of the location they are visiting.

The training content will depend on the level of risk the person is exposed to.

4. Monitoring

Your obligations to monitor your workplace depend on circumstances and need. Always consider the level of risk. The higher the risk, the more frequent and detailed the monitoring needs to be.

Other times when monitoring will be necessary include:

- To ensure that all risk has been covered by a new risk assessment that has been carried out due to a change in process, e.g. the installation of new workstations; and
- When an investigation takes place following an incident.

5. Supervision

The only way to ensure your workers are carrying out their safety obligations is to have adequate supervision. The level of supervision required in your workplace will increase if the level of safety control put in place to reduce a risk is low, i.e. the less effective the control measure used, the higher the level of supervision necessary.

6. Reporting

The governance structure of your company needs safety reporting at all levels, not just at the board level. Your workers need to know what safety looks like – what’s going right and what’s going wrong. This can only occur when they receive safety feedback from you, e.g. how many hazards were identified, the risk levels associated with those hazards and what control measures were implemented.



Basic Safety-Management Components

International Labour Organization SMS model

Since there are many models to choose from to outline the basic components of a safety management system, the one chosen here is the international standard promoted by the International Labour Organization (ILO). In the ILO document ILO-OSH 2001 Guidelines on Occupational Safety and Health Management Systems, the safety management basic components are:

- Policy
- Organizing
- Planning and implementation
- Evaluation
- Action for improvement

Although other SMS models use different terminology, the process and workflow for safety management systems are usually similar;

1. Policy – Establish within policy statements what the requirements are for the organization in terms of resources, defining management commitment and defining OSH targets
2. Organizing – How is the organization structured, where are responsibilities and accountabilities defined, who reports to who and who is responsible for what.

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3. Planning and Implementation – What legislation and standards apply to our organization, what OSH objectives are defined and how are these reviews, hazard prevention and the assessment and management of risk.
4. Evaluation – How is OSH performance measured and assessed, what are the processes for the reporting of accidents and incidents and for the investigation of accidents and what internal and external audit processes are in place to review the system.
5. Action for Improvement – How are preventative and corrective actions managed and what processes are in place to ensure the continual improvement process. There is a significant amount of detail within each of these sections and these should be examined in detail from the ILO-OSH Guidelines document.

Safety Stack | Safety Management System Framework Project Model

Since most of the SMS solutions in the U.S. are specifically designed for the aviation industry; non-aviation independent projects are underway such as The Safety Stack | [Safety Management System Framework Project](#), which was developed originally as an open source project that aids small businesses and organizations establish a base SMS framework. Frameworks such as this are designed to improve the way practitioners manage occupational safety & health and assist in complying with ever increasing safety & health regulatory standards. The Safety Stack SMS "Framework" is composed of the following key elements:

- Safety Administration
- Safety Policy, Programs, Procedures Manual
- Safety Orientation
- Safety Training
- Safety Meetings
- Safety Inspections
- Safety Incidents
- Safety Standards
- Safety Handbook
- Safety Miscellaneous

Non-aviation industry organizations in the U.S. find this open source, general purpose, SMS framework highly useful in the development of their own unique safety management systems since it can be downloaded, edited, extended & used freely.

Types of Service Providers

- Approved training organizations that are exposed to safety risks during the provision of their services
- Aircraft operators
- Approved maintenance organizations
- Organizations responsible for type design and/or manufacture of aircraft
- Air traffic services providers
- Certified aerodromes under the requirements, the service provider must implement an SMS accepted by their State that, as a minimum
- Identifies safety hazards
- Ensures that remedial action necessary to maintain an acceptable level of safety is implemented
- Provides for continuous monitoring and regular assessment of the safety level achieved
- Aims to make continuous improvement to the overall level of safety



The Components of a Safety Management System

An SMS should comprise the following four components:

- (1) Safety Policy and Objectives
- (2) Safety Risk Management
- (3) Safety Assurance
- (4) Safety Promotion

Safety Policy and Objectives

The Safety Policy outlines the methods and processes that the organisation will use to achieve desired safety outcomes. The creation of a positive safety culture begins with a clear, unequivocal direction from the Accountable Manager. In preparing a safety policy, Senior Management should consult with key staff members in charge of safety critical areas. Consultation will ensure that the safety policy and stated objectives are relevant to all staff and that there is a sense of shared responsibility for the safety culture in the organisation. The Safety Policy and Objectives can be divided into the following five areas:

- (1) Management Commitment and Responsibility
- (2) Safety Accountabilities of Managers

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- (3) Appointment of Key Safety Personnel
- (4) The Emergency Response Plan
- (5) Documentation

Conclusion

Attempting to do a work in the area of safety management in India posed a challenge. Identifying the objectives of the research, when not enough published material is available, was the first challenge. This was overcome by the use of international literature 178 survey and logical extension of the research findings and local expert opinion to understand the problem area and lay down objectives of the research. Formulation of research methodology was much easier. Design of the tool for data collection posed some challenge since the factors to be proved and questions to be asked to elicit response had to be appropriate for the respondents. When it came to sample selection and questionnaire administration, the delicacy of revealing safety related information and opinion posed a major hurdle. Some companies refused permission for this research. In those that permitted also, sample selection became an issue. This, however, became a boon in disguise helping the researcher to collect the response of a large number of participants rather than going for sampling. The large sample size from each unit helped to determine scores from that unit much more accurately. Differences between units became clearer and could be stated with more reliability.

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M. Vijay Lakshmi, PG Scholar
Department of Management Studies
Anna University Regional Campus

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Madurai 625 019
Tamilnadu
India
vijcuteajeesh@gmail.com

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