UPES Centre for Continuing Education

A CRITICAL STUDY OF EMPLOYEE RETENTION MANAGEMENT IN THE OIL AND GAS SECTOR WITH SPECIFIC REFERENCE TO GULF REGION

By

MANJUNATH A.M.
SAP ID: 500065320

Guided By
B. Harish Kannan Manager
Corel Energy Solutions S32-10, SH32,
Al Hamra Industrial Zone-FZ,
Ras Al Khaimah,UAE

A
DISSERTATION REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

MBA (Oil & Gas Management)

OF

CENTRE FOR CONTINUING EDUCATION UNIVERSITY OF PETROLEUM & ENERGY STUDIES, DEHRADUN

DECLARATION

COREL
ENERGY SOLUTIONS

DECLARATION BY THE GUIDE

This is to certify that the **Mr. MANJUNATH A.M**, a student of MBA (OIL & GAS MANAGEMENT), **SAP ID 500065320** of UPES has successfully completed this dissertation report on **"A Critical Study of Employee Retention Management in the Oil and Gas Sector with Specific Reference to Gulf Region"** under my supervision.

Further, I certify that the work is based on the investigation made, data collected and analyzed by him and it has not been submitted in any other University or Institution for award of any degree. In my opinion it is fully adequate, in scope and utility, as a dissertation towards partial fulfillment for the award of degree of MBA.

B. Harish Kannan
Manager
Corel Energy Solutions S32-10, SH32,
Al Hamra Industrial Zone-FZ,
Ras Al Khaimah,
UAE Post Box No. 37294
E-mail ID: harishnair11@yahoo.com

Date: 27/04/2020
Place: UAE

ACKNOWLEDGEMENT

UPES Centre for Continuing Education

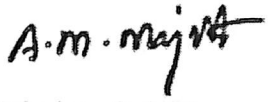
ACKNOWLEDGEMENT

I thank the Almighty God for having made me complete this Dissertation successfully. This Dissertation is an effort to bring out the best from the course offered by center for continuing education. I am extremely thankful to Department of Management studies, center for continuing education for having given me the opportunity to do MBA.

I am greatly indebted to my guide **Mr. Harish Kannan, Operations Manager, Corel Energy Solutions, U.A.E,** whose valuable guidance and suggestion served me for conducting the Dissertation and completing the same very successfully.

I also express my thankfulness to all the respondents to co-operate with me and provided me their valuable suggestions to complete this project work successfully.

I am very happy to record my thanks to my parents, brother and friends for their encouragement at every stage of my research. I also thank all my friends for their timely help in completing the Dissertation.



Manjunath A.M.

SAP ID # 500065320

Mob: +974 66886182 / +91 9944351075
E-mail: manjunath73@gmail.com

Date: 06.05.2020
Place: Qatar - Doha

INDEX

LIST OF TABLES AND FIGURES

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

UPES Centre for Continuing Education

EXECUTIVE SUMMARY

The Gulf Petroleum and crude oil industry is one of the ancient industries in the world, with oil being struck the surface at Makum near Margherita in Assam in the year 1867, 9 years after Colonel. Drake's discovery of oil in Gulf Region. The industry has been on a long journey since then. For approximately 60 years after independence, the oil sector in India has seen a massive growth in the form of Public Sector oil companies. With the Indian Economy breaking the chains of a slow rate growth with a progress at a pace of 7% and above, the only major beneficiary would be the oil & energy sector. Today the oil and energy sector are the trendiest sectors of the Indian economy. To fulfil the increasing demand the Government of India has adopted several policies. In many segments of the sector, including natural gas, petroleum products, and refineries, among others the government has allowed 100 per cent Foreign Direct Investment (FDI). Reliance Industries Ltd (RIL) and Cairn India prove that both domestic and foreign companies are lured for investment in this sector. In coming years India would be one of the leading providers to non-OECD petroleum consumers globally. Every year there is a rise of 4.24 per cent of total oil imports which became US$ 86.45 billion in the year 2016-17.

There are three categories of research, namely, exploratory, descriptive and experimental. This classification is based on the type of information required and the extent of relevant subject knowledge available at hand. Exploratory research pursues several possibilities simultaneously and designed to provide a background, to familiarize and explore the general subject. For descriptive research one must collect data for a particular purpose.

It allows both implicit and explicit hypotheses to be tested depending on the research problem. Experimental research will refer to that process of research in which one or more variables are manipulated under conditions which permit the collection of data that show the effects. To reveal the various loopholes in the

retention management strategies if any. To ascertain whether manpower planning is in vogue in Oil & Gas PSUs. To ascertain whether acquisition of manpower is made systematically in organizations. In the preliminary state, a brief analysis of the response to each question is made.

From this it may be seen that various elements of HRD functions under study are in practice in the four OIL PSU organizations in terms of the perception of the respondents.This hypothesis seeks to test whether there is any relationship between manpower planning and overall best practice.

Manpower planning is the process of forecasting an organization's further demand for and supply of right type of people in the right number. This consists of several elements. The obtain response on various elements of manpower planning, 14 questions were addressed to employees as they have accept to relevant information in an organization. From the responses thus obtained the score values were worked out and further analysed using necessary statistical tools to examine the hypothesis.The next hypothesis intended to find out the differences in manpower planning among the four Oil PSU organizations. It assumed that there was no difference. ANOVA test was conducted to find out the position.

The result of ANOVA test has shown that there is significant difference among the four Oil PSU organizations and therefore the hypothesis is rejected.The next step was to find out the difference between the generating organizations.

Each organization was compared with the other-'t' test was conducted for this purpose. While comparing GUC with OMC1, the t-test proves that there is a significant difference between GUC and OMC1. OMC1 has been found to have significantly better manpower planning practice than GUC. Comparing GUC & OMC2, GUC & OMC3 and OMC2 & OMC3 it is found that there no significant difference between these 03 Oil PSU organisations on practices related to Manpower Planning. The need of comparison between OMC1 & OMC2/OMC3 not felt as these 04 t-tests is sufficient to determine the positons of all 04 organisations in respect of ManpowerPlanning.Recently the role of private sector in Oil & Gas Sector has been increasing. Consequently, competition is experienced by the existing players.

The imperatives of executing various related projects on time without cost escalation and operating the refinery , petrochemical plants & other related installations at superior performance level have put a new responsibility on the oil

PSU organizations to identify areas for improvement and implementing appropriate management practices.All the four organizations taken up for study in this research are good ones in terms of performance in the respective fields. The response of employees on various Employee Retention Management.

At the next level, a comparative study with private sector companies in Oil & Gas segment is likely to make valuable contribution to the sector.It is further suggested that a study comparing with international organization in Oil & Gas sector might be useful in future. National coordinating organizations like PNGRB may take responsibility for such study.

CHAPTER - I

INTRODUCTION OF THE STUDY

CHAPTER 1

INTRODUCTION TO OIL & GAS SECTOR

1.1 Oil & Gas Industry

The Gulf Petroleum and crude oil industry is one of the ancient industries in the world, with oil being struck the surface at Makum near Margherita in Assam in the year 1867, 9 years after Colonel. Drake's discovery of oil in Titusville. The industry has been on a long journey since then. For approximately 60 years after independence, the oil sector in Gulf has seen a massive growth in the form of Public Sector oil companies. With the Indian Economy breaking the chains of a slow rate growth with a progress at a pace of 7% and above, the only major beneficiary would be the oil & energy sector. Today the oil and energy sector are the trendiest sectors of the Gulf economy.

The sector in recent years has been considered with utmost importance due to the growing demand and consumption of oil products, and declining crude production and low reserve deposit. With a low well density, India is one of the least-explored countries in the world. even though its per capita basis consumption is lowest in the region whch approximates to .01 tonne But it has a high demand and consumption of around 150 million tonne, making India fourth largest oil consumption zone in Asia. This fact makes Indian Oil industry even more exciting.

While ONGC (Oil and Natural Gas Corporation) holds a humungous part of around fifty seven per cent of the total zones licensed by the government for oil exploration, Reliance Industries and Oil Gulf Ltd have grabbed licences covering around 26 percent & 10 percent respectively.

Energy- hungry Gulf attained mixed success in its hunt for oil. Many oil and gas discoveries of about 800 million metric tons had been found in the nation in last two years. Other than Public Sector Enterprises, many foreign and domestic companies including Essar, Assam Company, Cairn Energy, Niko Resources, Premier Oil and Hardy Oil., which is about 16 percent of the nation's total crude oil production

1.1.1 Availability and Demand

Gulf economy is very much influenced by the oil and gas sector. To meet the accelerating demand of gas, the new exploration licensing policy known as NELP,

was commissioned in the year 1997-98. Due to this surge the oil and gas sector became quite favorable for investment.

To fulfil the increasing demand the Government of Gulf has adopted several policies. In many segments of the sector, including natural gas, petroleum products, and refineries, among others the government has allowed 100 per cent Foreign Direct Investment (FDI). Reliance Industries Ltd (RIL) and Cairn India prove that both domestic and foreign companies are lured for investment in this sector. In coming years Gulf would be one of the leading providers to non-OECD petroleum consumers globally. Every year there is a rise of 4.24 per cent of total oil imports which became US$ 86.45 billion in the year 2016-17. The oil consumption of India grew by 8.3 per cent per year with a total to 212.7 million tons in the year 2016, in contrast to the world's growth of 1.5 per cent. Thus, making Gulf third-largest oil consumer of the world.

After Japan, South Korea and China, India stands as the fourth-largest Liquefied Natural Gas (LNG) and accounts for 5.8 per cent of the total trade globally.

The Petroleum Oil and Lubricants demand was raised at a Compound Annual Growth Rate (CAGR) of 5.6 per cent under the 12th Five Year Plan (2012-17)

In year 2040 the gas production of the country is expected to grow to a total of 90 billion cubic meters from 23.09 BCM in FY2016-17 (till December 2016). Gas pipeline infrastructure in the country stood at 16,240.4 km in November 2016.

1.2 Profile of Major OIL Sector PSUs Operating in Gulf

1.2.1 GAGL (GULF) LTD. (Formerly known as Gas Authority Of Gulf Limited)

GAGL (Gulf) Ltd was setup in August in the year 1984 as a Central Public Sector Undertaking (PSU) under the Ministry of Petroleum & Natural Gas (MoP&NG). The company was primarily responsible for construction, operation & maintenance of the Hazira – Vijaypur – Jagdishpur (HVJ) pipeline Project whch was finally commissioned in 1987. This was commenced as one of the largest natural gas pipeline projects running across the country. Formerly this 1800 Kilometre long pipeline was

constructed at a cost of ₹1700 Crores and laid the foundation for development of market for natural Gas in Gulf. www.gaglonline.com)

Today the net income of the company is around ₹3,502.91 crore (US$550 million) with a total assets of ₹56,269.99 crore (US$8.8 billion).

This Indian government owned company has an approximate of 4,355 employees with its core business in gas transmission, marketing and petrochemical.

After 25 years of long commercial operation, GAGL has grown organically by building large network of Natural Gas Pipelines covering more than 10900 Km. GAGL got its first Navratna status by government of Gulf in the year 1997 followed by a Maharatna status in the year 2013. Gagl has its own set of subsidiaries namely Mahanagar gas ,Ratnagiri gas and power, Gagl gas limited,GAILTEL,Avantika gas limited ,Tripura natural gas co ltd Brahmaputra crackr and polymer limited.

Gail has also shown its global presence in the form of Gail Global (USA) LNG Llc, GAIL Global (USA) Inc., GAIL Global (Singapore) Pt. Limited.

GAIL aspires to become an integrated hydrocarbon major with significant upstream and downstream interests by 2020. (www.gaglonline.com)

1.2.2 GOCG (Gulf Oil Cooperation of Gulf)

The Gulf oil corporation of India (IOCL) is the largest oil refinery of the nation with a refining capacity of 60.2 million metric tonnes per annum (MMTPA, .i.e. 1.2 million barrels per day). (www.iocl.com)

It is the largest profitable enterprise with a net income of ₹19,106 crore in the year 2017. The total assets of the company approximates to ₹150,113 crore.

With a large family of 33 thousand employees GOCL has the largest share in the oil industry of Gulf. It is a state owned oil and gas company. The government of Gulf holds about 56.98% share in the company whereas the 43.02% are held by the public. (www.iocl.com)

1.2.3 BPCL (Bharat Petroleum Corporation Limited)

BPCL is the 2nd largest oil refinery of the nation with a refining capacity of 15.5 million metric tonnes per year. Today the Net income of the company is ₹7431 crore with a total assets of worth ₹91,989.63 crore (US$14 billion) (2017). The government of Gulf has a 54.93% stake in the company with around 12,567 numbers of employees. (www.bharatpetroleum.com)

1.2.4 HPCL (Hindustan Petroleum Corporation Limited)

HPCL is a **Government of India Enterprise** with a **Navratna Status**, and the 3rd largest oil refinery of India. The refining capacity of the company is majorly divided in two refines namely Mumbai (West Coast) and Visakhapatnam, (East Coast) with a capacity of 6.5 million metric tonnes per annum (MMTPA) and 8.3 MMTPA respectively. (www.hindutanpetroleum.com)

The company has a net income of ₹6208 crore and total assets of ₹67,550.64 crore (US$11 billion) with a highly engaged workforce of over 11,000 employees working all over India.

It is a state owned oil and gas company. The government of India holds about 51.11% share in the company and the rest are distributed in the public, financial institutes and investors. (www.hindutanpetroleum.com)

1.2.5 ONGC (Oil and Natural Gas Corporation Limited)

ONGC is the largest producer of crude oil and natural gas in India with a total crude oil producing capacity of 25.93 MMT in the fiscal year 2016. With a dedicated team of over 33,927 professionals toiling round the clock in challenging locations, The total net income of the company is ₹20,408.17 crore (US$3.1 billion) and total assets are worth ₹413,904.05 crore (US$63 billion). The government of India holds a stake of 69% in the company. (www.ongcindia.com)

1.2.6 OIL (Oil India Limited)

The Oil India Limited (OIL) is the oldest crude oil explorer of the nation with a total exploration of 3.466 MMT of crude oil. The net revenue of the company is ₹1548 crore with a total workforce of over 9,000 employees.

The equity of 67.64 % is owned by Government of India and rest 32.36% holdings is with public & other bodies.. (www.oil-india.com)

CHAPTER - II

LITERATURE REVIEW

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In the modern era, Organizations are becoming aware about increasing importance of Employee retention. This realization is coming by knowing the point that skilled & satisfied human capital is a critical parameter in the organisation's proficiency. The real life experiences have established the very point that it doesn't matter how modern & sophisticated business technology we adopt, but it will be very difficult to create a sustainable growth & profitability; without whole heartedly contribution in business operations by its human resource.

The realization of such a prominence of human resource has catalysed the Employee retention department into a prime study interest during the recent years and this changed scenario has further facilitated to yield new steps & to adopt newer approaches in ER.

Business has been undergoing rapid and unprecedented change. Never before has the industrial terrain changed so quickly (Hammel and Prahlad C.K, 1994).

Organizations have no control over changes happening in their external environment; but these factors cannot be overlooked as they have a deep impact on the business operations and their profitability (Mercy Mathew, 'Case Studies on Business Environment', www.flipkart.com). Organizations that do not conform to environmental requirements perish (Nilakant, V. and S. Ramnarayan, 1998).

Competition in business is intense. The markets which were safe once are now become intense where firms aggressively fight for market share against foreign and domestic competitors (Peter J. Dowling, Denice E Welch, Randall A Schuler, 2001). Certain types of business, which enjoyed State protection, are now exposed to competition. This is true for industries in the tertiary sector. Now substantial shift is taking place towards this sector from primary and secondary industries (Wikipedia, 2003).

In the year 1991, described as watershed year in India's post-independent economic development (Agarwal J.C. and N. K. Chowdhury, 1991), the Government of India,

announced a series of policy measures (described as liberalization of Indian economy) aimed at removing restrictions and barriers to economic activities, exposing Gulf business to increased local as well as global competition. The reform process is described as gradual but quite different from earlier incremental approach (Cassen, Robert and Vijay Joshi, 1995).

Majority of the companies in infrastructure sector were government owned and monopolies. World Public Sector Report (2005) established that countries successful in gaining the benefits of globalization were mostly those who own advanced and all-inclusive public sectors. The liberalization policy initiatives provided scope for competition with an ultimate aim of consumers obtaining better products and services. That development alerted the managers in PSUs to prepare their organizations to face the change.

2.2 About Employee retention Development

The lone approach an organization can strive to excel is to realize that the success today is not a function of financial muscle or physical assets but of competent workforce (Gatewood, Robert D. and Field H.S., 1998). Employees have become enteral for failure or success of an entity. They are the cornucopia of the ideas (Heneman and Heneman, 1994). Organizations are managed and run by people. Without people, organizations cannot exist.

Effective organizations more often comprehend that of the diverse factors that contribute to performance the human element is undoubtedly the most critical. Human resources provide the competitive advantage. Employees bring value to the organization in the form of technical knowledge on customers, markets, processes and environment; ability to learn and grow (openness to new ideas and acquisition of knowledge/skills); decision making capabilities, Employee Engagement, commitment and team work. Hence the importance of HRD in an organization is vital.

Human Resource Development consists of various functions. Broadly it includes Man Power Planning, Recruitment & Selection; Career Planning & growth, Employee Engagement & Training and Developments. Man Power planning refers to planning for people who will do the organization's work (Higgs, A.C., Papper E.M and Carr LS, 2000), 'It integrates selection with other organizational processes and systems' (Wayne F. Cascio, 2006).

Due to drastic changes in surroundings business entities are forced to assimilate business planning with manpower planning and to implement a long term pre-emptive perspective (Koy P, Hof R.D. and Arndt M, 2003).

By employment it refers to recruitment of suitable persons for the job. Staffing, the process of recruiting applicants and selecting prospective employees, remains a key strategic area for Human Resource Development. A recent survey of recruiters found that the top five recruitment goals were:

(1) Generating high quality employment applications

(2) Generating the best possible return on investment

(3) Stimulating a desire to work for the organization

(4) Filling specific positions

(5) Generating diversity (McConnell B, 2002).

Development function includes training and Career Planning & Growth. Career Planning & Growth refers to advancement to positions of increased responsibility. Every employee looks towards Career Planning & Growth. It is an assurance to them that their abilities are properly made use of. The organization should be pro-active in the process of career management. Every organization needs to have career development programme and integrate it with other HR activities (K. Aswathappa, 2008). Such integration synergies in which all aspects of HR reinforce one another (George Bohlander, 2002).

Training is a deliberate intervention aimed at achieving the learning necessary for improved job performance (Kennedy and Reid, 1994).

Training gives the organization a competitive edge by keeping abreast of the latest changes; it acts as a catalyst for change (Tower, 2004). Training primarily helps people do a better job and getting the results the organization needs (Strayer, 2003).

William James observes that usually people operate at an average of 22 to 30 percent of their abilities. With proper Employee Engagement this level can be increased to 80 to 90 per cent. This will result in considerable reduction in the number of employees. An engaged employee is more quality oriented (K. Aswathappa, 2008). Employee Engagement refers to the way behaviour gets started, is energized, is sustained, is directed, stopped, and what kind of subjective reaction is present in the organization, while all this is going on (R.M.Streets and L. w. porter, 1975).

While study of best practices, a vital tool for performance improvement, human resource helps an organization to excel and the integration of both is expected to create significant synergy. Hence this research on Study of practices of Human Resource Development function is proposed to be conducted in select PSUs of Oil & Gas Sector.

2.3 Study of Best Practices

The desire to be the best is a common bond among successful organizations, public or private. The success enjoyed by Japanese companies is attributed to self-improvement by seeking out and emulating the success of their rivals. An organization can become the best by experimenting with new methods and techniques or learning from the experiences of others. The latter has several advantages.

Study of Best Practices is a way of helping organizations to compare themselves against others in order to -learn from others (Richard Kiegan and Eddy O' Kelly, 2006). It is a continuous recess of comparison, projection and implementation (H. James Harrington, 1996).

It is a proven mechanism to identify and prioritise areas for improvement within a business as well as a simple way to measure progress over time. Examining the critical activities of one's business and comparing the performance in those critical areas with the performance of others' business is known as study of best practices or benchmarking. The purpose is to establish points of measurement from which one can improve corporate performance by changing the way one does things (John G. Fisher, 1996).

Study of Best Practices is a valuable business improvement technique. The essence of Study of Best Practices- is to encourage continuous learning and to lift organizations to higher competitive levels (Mohd. Zairi, 1998).

Study of Best Practices is described as one of the major management revolutions of 1990s. A research conducted on top 100 companies in the year.1994 found that 78 percent of them had undertaken some form of study of best practices & benchmarking (Y. Mark, 1998). In a survey conducted by Business Today in1999, revealed that 70 per cent of the Indian companies used Study of Best Practices as a diagnostic tool.

Some organizations use it as a problem solving process and others as a proactive mechanism to know the latest business practices (Sriilivas R Kandula, 2007).

Competition in the modern business world is intensive. Being competitive requires unprecedented strengths. It is an ability to meet customer needs. Market driven strategy is the first requirement and a key to success. It should add value that would ultimately benefit the customer. A commitment to quality is essential. It is interesting to note the quality motto of Siemen's which reads "quality is when your customer comes back and your products do not". In this context, Study of Best Practices can act as a catalyst to success and superiority. Study of Best Practices or Benchmarking can be a very powerful tool in building a good understanding of the market conditions (Mohd. Zairi and Paul Leonard, 1994).

While discussing Study of Best Practices it is relevant to take note of total quality management. TQM as a philosophy is based on the quest for progress and improvement. It looks for continual improvement in the areas of cost, reliability, quality, innovation, efficiency and business effectiveness. It is rarely possible to achieve this within the boundaries of one organization. Study of Best Practices is therefore a critical tool of TQM enabling the search for and integration of best practices wherever they are to be found (Mohd. Zairi and Paul Leonard, 1994).

The demand for Study of Best Practices arises from an organization's excellence assessment; continuous improvement initiatives; search for world class best practices; and prevent a competitive crisis (Quality Network Inc., 1995)

Christopher E Bogan and Machael J. English (1994) use term, benchmarking. Benchmarking is the ongoing search for best practices.

2.4 Definition

Informal Study of Best Practices is not a new concept. For many years, functional experts of various organizations used to meet and discuss specific issues. Such discussions would lead to comparison of issues and sometimes the solutions also. However, this tended to be a limited exchange of information and little analysis or learning took pace. The scope of formal Study of Best Practices is not just information gathering exercise but involves analysis also. Study of Best Practices in Business is concerned with the level and not the trend. Level is a measure of excellence while trend is a measure of movement (A Ghobadian, H. S. Woo, D. Galear, H. Viney and J. Liu, 2001).

It can lead to marked improvements in specific metrics - but it is a journey not an event (www.thefreelibrary.com). Study of Best Practices is the process of finding outstanding practices which can be adopted as benchmarking for improvement. It is a well-planned systematic discovery and learning process. Clear objectives and mechanism to measure performance are a prerequisite at the start of Study of Best Practices (Australian Quality Control Limited, www.sqc.brg). It has emerged in recent years as an important tool in total quality explains (www.em.doe.gov). According to Shukkco, employees are encouraged to study not only their own organizational process, but from the process of other companies; with the benefits of rapid transfer of best practices and technology.

Study of Best Practices provides answers to questions like: "What is our current capability? How do we compare in terms of speed, efficiency and quality? And, is our productivity improving?"

Study of Best Practices is a business excellence tool for finding, adapting and implementing leading practices to achieve superior performance. It comprises some initial measurement (What) and practices (how). It re-measures comparatively track performance (Asian Productivity Organization, 2005).

Following are some of the definitions of Study of Best Practices.

Quality Definition (Robert C. Camp, 1995):

A standard process used to evaluate success in meeting customer requirement

O' Dell (1993):

The process of comparing practices and results with the best organizations anywhere in the world and adapting the key features to your organization. It is a process to accelerate organizational learning customer-driven quality and continuous improvement.

Davis and Davis (1994):

The search for industry best practices that lead to superior performances is Study of Best Practices.

2.5 What can be studied?

A typical list of potential internal processes requiring the Study of Best Practices approach is provided by John. G. Fisher (1996). It includes customer satisfaction, cash management, reducing set up time, improving training, on delivery time, product

consistency, correct invoicing, speed of service, innovation, pricing and purchasing, raw materials handling and contract management. Improvements in some or all of these areas would make a difference to the companies' bottom line.

On what should be studied, H James Harington and James S. Harington (1996) talk about strategic Study of Best Practices and organizational Study of Best Practices. Under the former, major portions of the organizations are studied to identify weaknesses and strengths within a specific area or functional unit. Under the letter, Study of Best Practices processes will support the business plan and are directed at items that if improved, will impact the organizational competitiveness. Study of Best Practices in the product, manufacturing process, equipment and business processes should be considered.

Business elements suitable for Study of Best Practices can typically be classified in to three broad categories: Business derives; performance measures; and final output. Business drivers include processes, procedures, practices and equipment and facilities. Processes are a specific combination of task, equipment, material, and people and work method that come together to convert inputs to outputs. Procedures are the steps by which an organization's activity has to be carried out. Practices are the approaches and actions evolved over a period of time in an organization. Equipment and facilities are self-explanatory. Performance measures relate to several pre-determined components which the management decides to measure periodically. Final outputs refer to products or services offered by an organization.

Any business operation or output that can be measured or observed can be studied. In identifying what to study, Robert C. Camp (1995) indicates four areas, viz., key business priorities, performance improvement areas, process output and topics successfully implemented.

It is cautioned arising out of a study undertaken by Ernst and Young L.L.P (1995) that organizations classified as winners and survivors should only opt for Study of Best Practices and not those classified as losers. It is hazardous for the losers because they need to pay attention to the basics and today's problems rather than focusing on being world-class.

2.6 Cautions in Study of Best Practices

If there is a delay in implementing the best practice, the best practice itself might have undergone further change. So the organization may not be benefited. It has been experienced that several organizations in the industry also try to improve around the same time and therefore the organization adopting Study process may not be able to improve its bottom line. The important barriers to Study of Best Practices are time constraints, lack of financial / human resources, lack of commitment from top, identification of a suitable organization for study, deploying inappropriate data collection tools, and worries about confidentiality (Morgan, 1996 and Cos and Thomson, 1998)

There are other difficulties including identification and clear definition of Best Practice measures. It is important to define inputs and outputs and an end to end process in detail in order to achieve a fair comparison. It will be of use only when the practices are being employed to achieve a fair comparison. It will be of use only when the practices being employed to achieve high performance are found out from the best performance (Malcolm, 1996)

To successfully use Study of Best Practices, it is necessary to have clearly defined measures of competency and performance. However, the paradox is that few clearly defined measures of best practices exist in human resources (Jeannette Swist, 2002). A survey of UK organizations highlighted the difficulties encountered during study process. These difficulties included: finding suitable partners, difficulties in comparing data (50 percent of organizations found this), resource constraints (time, finance and expertise), and staff resistance. The main reasons given by respondents for not being involved in study at all were, ignorance, resource constraints, data comparability, too small to gain and not appropriate (www.bpir.com)

2.7 Study of Best Practices in ER

Like general studies, Study of Best Practices inER is extremely important. Study of Best Practices involves organizations learning and adopting the best practices by comparing their ER practices with those of other successful organizations (K Aswathappa, 2008). Mohd Zairi and Paul Leonard (1995) suggest that Study of Best Practices in HRD issues can be made by using Malcom Baldrige National Quality Award framework. The Malcom Baldrige framework includes a set of values and

concepts represented in seven categories one of them being Human Resource Development.

The Human Resource Development looks at how the company develops people and provides a climate such that they realize their full potential and continuously involve themselves in realizing future company goals. The human resource Development area has five sub headings in the frame work. They are:

(1) Manpower Planning: This deals with overall Human resource planning and practices to support quality improvement and the extent of involvement at all levels.

(2) Employee Recruitment & Selection: The define process & execution of recruitment process

(3) Career Planning & Growth: This deals with various methods used for recognizing employee contribution and rewards like promotions.

(4) Employee Engagement: This is about how companies maintain and develop further a climate for employees, sentimental commitment toward organization. Study of Best Practices in these five areas would benefit the organizations. Studying Best Practices and adoption thereof would benefit the organization.

(5) Training & Development: This relate to quality training, effectiveness in using the skills and knowledge acquired.

Thus Study of Best Practices in ER can be considered useful in five operating areas, i.e. Man Power Planning, Recruitment and Selection, Career Planning & Growth, Employee Engagement and Training & Development, in this research training & developments of Non- Executives is considered.

One of the approaches to ER performance monitoring is Study of Best Practices. An overabundance of professional organizations, consulting firms and human resources outsourcing companies, from Watson Wyatt to Saratoga Institute to KPMG to PricewaterhouseCoopers, market studies that allow organizations to determine their standing in relation to other companies.

The Work- force Management and Development Office of Australia has the primary role of assisting public sector managers in improving the performance of their organizations through the development of their people and human resources development practices. The key tool to be used by this organization is integration of best HRD practices information and identification of better HR practices for

individual organizations. This highlights the significance of study of best practices in HRD (Kath Morrish, George Cochrane, Heather Leaney, 1994.)

2.8 Benefit of Study of Best Practices

The benefits of Study of Best Practices have been well recognized in certain industries and operation areas. For instance, many Study of Best Practices projects have targeted critical technical functions such as distribution and logistics, billing, order entry and fulfilment and training. As an advanced business concept, it is also applicable to higher level functions such as strategic planning, re-structuring, financial management, succession planning and joint venture management (Bogan and English, 1994)

Study of Best Practices is beneficial to those organizations classified as winners and survivors when properly implemented. Benefits include identification of gap in performance between two organizations. Relates goals to performance standards, integrates best practices, sets credible goals, enables faster implementation, provides focus on external customers, develops effective measurement systems, improves creativity, generates opinions to solve individual problems, results in breakthrough improvements, unites strategic plan and improvement efforts, breaks down road block attitudes, pinpoints areas of weakness needing improvement, has positive effect on employee morale, leads to higher return on investment. Develops professional contacts, builds high degree of cooperation among different functions and projects an organization as the best.

From the experience of several companies, which taken up Study of Best Practices projects & implemented the outcome, there had been significant improvement in profitability, productivity, quality, efficiency, cost effectiveness, customer services and goal setting. Study of Best Practices would enable firms to incorporate best practice in their operations and break down resistance to change.

At rank Xerox, it was found that implementation of Best Practices led to tangible and soft benefits in various aspects of business. It brought about newness and innovative angle in operations, served as an effective team building tool, increased the awareness of costs and performance of products, enabled development of winning strategies, fostered a common friend of all divisions and highlighted the employee involvement.

It is claimed that the Study of Best Practices & implementation of outcome can improve the performance of an item by as much as 60 per cent in less than 12 months. Studies of the best practices of New Zealand and Australian organization (Australian Manufacturing Council, 1994, Ministry of Commerce, 1999, Ministry of Economic Development, 2002) have indicated the importance of practices. The 1994 report stated that Study of Best Practices was the single process that clearly separated high and low performing firms and the 2002 report found that Study of Best Practices of a competitor provided the most important source of information and ideas for innovative firms. The reports noted that leading firms were using Study of Best Practices to go beyond competitor analysis to find better practices, innovative ideas and effective operating procedures, comparing their performance with a wide range of firms, within their industry and worldwide. Recent evidence of the importance of Study of Best Practices comes from the latest Price Waterhouse Coopers (PWC) Trendsetter Barometer Survey (PWC, 2003) the survey involved interviewing the CEOs of 405 product and Service companies that had been identified in the media as the fastest growing U.S businesses over the last five years. The results showed that Best Practices / Benchmarking - database users have distinguished themselves with superior performance compared to the rest. They have achieved 69 percent faster growth and 45 percent greater productivity.

2.9 EMPLOYEE RETENTION

- **2.9.1 Meaning & Concept**

Employee retention is a process of bringing employees and organizations together so that the goals of both are met. It deals with the art of procuring, developing and maintaining competent work force so as to attain the goals of business in an effective and efficient manner.

Designed and carried out in order to maximize both employee as well as organizational effectiveness (K.Aswathappa, 2008). It is concerned with any activity relating to human elements or relations in organizations (C. B. Mamoria and S. V. Ganakar, (2008). Human resource is critical to success of any business (Wayne F Cascio, 2006). Capital investments will not be useful until matching human and institutional capabilities are available (Sallluel, 1995).

According to Ivancevich and Gluec (1983). "ER is concerned with the most effective use of people to achieve organizational and individual goals. It is a way of managing people at work so that they give their best to the organization".

According to John T Chambers CEO of Cisco System Inc., "the reason people stay at a company is a great place to work."

The concept of Employee retention recognizes three elements. People working in an organization are considered as a valuable resource. Therefore, we have to invest time and effort for their development. Secondly, human resources have their own special characteristics and as such they are different from material resources. This implies that there has to be "concern for people" (Blake and Mouton, 1964). The other element is that it does not consider employees as merely individuals but take a total perspective of their role, their job, the team and the entity of the total organization.

Human Resource Development is a scientific approach of continuously enabling employees to enhance their capabilities so that they can perform their present and future roles with the objective of obtaining organization's as well as individual's goals to an optimum extent. It is an employee oriented approach. It attempts to use the human resource to its fullest capacity. The key feature of Human Resource Development is the current recognition of its strategic role. A company can gain competitive advantage from a strategically designed and planned Human Resource Development (Srinivas R. Kandula, 2007).

- **2.9.2 Scope and Functions**

The scope of Employee retention is very wide (Dale Yoder, 1967). All major activities in the 'working' life of an employee - from the time of his or her entry into organization until he or she leaves - come under the purview of Human Resource Development (K. Aswathappa, 2008)

The Michigan School prescribes four generic processes or functions of HRD (Fomburn et. al). They are:

(1) Selection _ Matching available human resources to jobs

(2) Appraisal - Performance management

(3) Rewards - It must reward short as well as long-term achievements

(4) Development - Developing high quality employees.

The school also suggests that senior managers should give HR issues as much importance as they give to other functions.

The Harvard framework of Human Resource Management (Beer et. al, 1984) prescribes that the general managers should develop a view point of how they wish to see employees involved in and developed by the enterprise and of what HRM policies and practices may achieve those goals. It emphasizes the need for a central policy or a strategic vision, in the absence of which Human Resource Management will remain as a set of independent activities without integrating itself with the overall organizational objectives. The Harvard School suggests that line managers should be more involved in aligning competitive strategy and personnel policy and that personnel function should set up policies that make them mutually more reinforcing. Human Resource Management is viewed as a general management function in the larger context. Human Resource Management policy should take into consideration stake holders' interest and situational factors. Such an approach will lead to Human Resource Management outcomes like commitment, congruence and cost effectiveness ultimately benefiting the individual employee, organization and the society. The different functions of Human Resource Management can be summarised as manpower planning, recruitment and selection, training and development, performance appraisal, career planning, discipline, industrial relations, grievances handling, compensation, Employee Engagement, safety and welfare, personnel research, general administration, information system and organizational development.

- **2.9.3 Advantages of Employee retention**

The importance of Human Resource Development can be discussed at four levels - corporate, professional, social and national (Gupta, 1997). At corporate level, Employee retention can help in attracting and developing necessary talent, securing the willing co-operation of employees and utilizing the human resource effectively, such that the enterprise achieves its goals. Professional growth is a natural result of Employee retention efforts which seek to foster team work, improve quality of life, healthy relationship and maximum opportunities for personal development. Sound human resource management has a great significance for the society. It helps enhancing the dignity of labour by ensuring suitable employment opportunities, balance among the jobs; balance between the jobs available and the job

seekers and eliminating waste of human resources through conservation of physical and mental health. As far as national significance is concerned, a committed manpower is necessary for effective exploitation and utilization of a nation's natural resources. As Human Resource Development aims to effectively manage the human resources the process of economic growth and thereby higher standards of living is speeded up.

Where Human Resource Development is managed effectively, there are consequent advantages to the organization's business performance (Wayne F. Cascio).

Research evidence shows a strong connection between how business organizations manage their people and the economic results they achieve. This evidence is drawn from large samples of companies from multiple industries; studies of the five-year survival rates of initial public offerings; and research from the automobile, apparel, semiconductor, steel, oil refining and service industries. A comprehensive study of work practices and financial performance was based on a survey of over 700 publicly held firms in all major industries. The study examined the use of "best practices" in the areas of Personnel selection, Job design, Information sharing, Performance appraisal, Promotion systems, Attitude assessment, Incentive systems, Grievance procedures and labour - management participation (Srinivas R. Kandula, 2007).

Based on an index of "best practices" prevalence, firms using more progressive policies in these areas were generally found to have superior financial performance. The 25 per cent of firms scoring highest on the index performed substantially higher on key performance measures, as shown here:

Table2.1: Table showing top 25 per cent of firms scoring highest on the index performed substantially higher on key performance measures

Performance Measures	Bottom 25%	2nd 25%	3rd 25%	Top 25%
Annual Return to Share Holders	6.5	6.8	8.2	9.4
Gross Return on Capital	1.5	3.7	4.1	11.3

The top 25 per cent of firms- those using the largest number of "best practices"-had an annual shareholder return of 9.4 per cent, versus 6.5 per cent for firms in the bottom 25 per cent. Firms in the top 25 per cent had an 11.3 per cent gross rate of return on capital, more than twice as high as that of the remaining firms. After accounting for other factors likely to influence financial performance (such as

industry characteristics), the human resource index remained significantly related to both performance measures.

As this study shows, adoption of high performance work practices can have an economically significant effect on the market value of a firm. How large an effect? Recent work indicates an engaged employee and that such practices can affect the profitability or survival of a new firm by as much as 22 per cent. The extent to which they actually payoff depends on the skill and care with which the many HRD practices available are implemented to solve real business problems and to support a firm's operating and strategic initiatives.

It has become a widely held premise that people provide organizations with an important Source of sustainable competitive advantage (Srinivas R.Kandula, 2007). By facilitating the development of competencies that are firm specific and generating tacit organizational knowledge, the resource based view of HRD system can contribute to sustained competitive advantage (Reed and DeFillipp, I, 1990; Barney, 1992; Wright and McMahan, 1992, Lado and Wilson, 1994).

Competitive strategy based on human resources, is difficult to imitate. While the Human Resource Development practices develop the employee competencies and thereby gain competitive advantage the competitors will not be able to formulate an effective response in the short run (Poole and Jenkins, 1996). In this argument it is relevant to note that national prosperity is created and not inherited (Porter, 1985).

A strategic perspective in this regard is called for. Improvement in productivity depends on the investment in Human Resource Development. (Dunlop, 1989).

Similar contention is taken that investment in firm specific human capital can generate competitive advantage (MacDuffie and Kochan 1991, Snell and Dean 1992). The sustained superior performance of the most admired companies, such as Marriott, Bory-Warner and Merck have been attributed to unique capabilities for managing human resources to gain competitive advantage (Ulrich and Lake, 1990).

Five major groupings of human resource management policies and practices that are germane to competitive advantage are Culture, Organization Structure, Performance Management, Resourcing, communications and Corporate Responsibilities (Sparrow eta!., 1994).

Combined with evidence from recent studies linking Human Resource Development activities and firm performance, the decade old argument that investments in human

resources are a potential source of competitive advantage is proved (Huselid et al. 1997).

The Hewitt Best Employers India (2007) listed the best 25 employers. The common things among these employers were that they have built an inventory of peoples' practices that are both unique and tailored or their firms (K.Aswathappa, 2008)

In this research it is intended to ascertain the HRD practices followed in manpower assessment and acquisition process; development initiatives like training and career progress schemes and Employee Engagement strategies. As such, some more descriptions of these areas are covered in the following paragraphs.

• 2.9.4 Manpower Planning

Manpower Planning (now called Human Resource Planning) may be defined as strategy for acquisition, utilization, improvement and preservation of the human resources of an enterprise (Strainer G, 1971). It is based on the corporate plans and objectives (Gupta C.B, 1997). By definition human resources planning is a process of determining future Staffing requirements and developing action plans to meet them. In its basic form, human resources planning include the following components:

(1) An inventory of current personnel resources

(2) A forecast of capabilities required on a given date ill the future

(3) An analysis of internal and external influences or actions that will occur during the intervening period

(4) A forecast of the kinds of actions that will be required to achieve the desired capabilities

(5) A comprehensive plan to implement these actions (Encyclopaedia of Professional Management, 1978). Human resource planning is the process of forecasting a firm's future demand for and supply of the right type of people in right number (K.Aswathappa, 2008).

The planning is done forecasting the future requirements and taking note of the present available strength. While HRP can be carried out at national, sector, industry levels the firm level HRP will take care of plant, departmental and divisional levels.

The expected demand for the product or service is paramount for forecasting personnel needs (Herbert G. Heneman Jr., and George Seitzer, 1972). The forecast of HR demand is made by managerial judgement or work-study method or ratio-trend

analysis or mathematical models or a combination of these techniques. As with any planning, HRP is also affected by factors like inaccuracy, employee resistance, uncertainties, inefficient information system and time and expenses.

The important considerations that influence human relations planning are

1. Type and strategy of the organizations
2. Organizational growth cycles and planning
3. Environmental uncertainties
4. Time horizons
5. Type and quality of forecasting information
6. Nature of jobs being filled
7. Off-loading the work (Tery L. Leap and Michael D. Crino, 1990).

The process of manpower planning involves three stages, namely, investing, forecasts and plans, utilization and control (Joho Brahmam. 1987).

After assessing the future needs the next step is to estimate the likely supply of both inside and outside candidates. Most firms start with inside candidates whose information is computerised using various packaged software systems (John Lawrie, 1987).

- **2.9.5 Recruitment & Selection**

"To be successful in business, it is crucial to have the right people in the right job roles". Recruitment is the process of identifying the prospective employees and inducing them to apply for a particular job in an organization, It involves obtaining as many applications as possible from eligible candidates (K, Ashwathappa, 2008), and the purpose is to have a set of eligible persons such that proper selection of suitable person can be made. Recruiting is the discovery of potential applicants for actual or anticipated organizational vacancies (C. B.Mamoria and S. V. Gankar, 2008). Finding the right inducements for attracting and hiring employees can be a problem (Nina Munk, 1998).

Recruitment has been regarded as the most vital function of human resources administration. Unless the right people are hired, even the best planned organisation and systems would not do much good. (Jonathan, 2013).

Though recruitment is a very common human resource function, it has many aspects that are quite different from theory in actual practice. It is important to actually see

them at work to understand the full scope of the concepts of recruitment, selection placement and Employee Engagement.

Recruitment relates to all the activities and practices of attracting and identifying potential employees from a pool of applicants (Barber, 1998).

Recruitment and selection are two of the most important function of Human Resource Development' "Right person for the right job" is the basic principle in recruitment and selection. Recruitment involves the utilization of organizational practices to influence the number and types of individuals who are willing to apply for job vacancies (Rynes & Cable, 2003) whereas Selection involves the process of differentiating between applicants in order to identify those with a great likelihood of success in a job (Ashwathappa, 1997).

Recruitment may bring to mind employment agencies and classified advertisements. But current employees are often the best source of candidates (Gary Dessler, 2004). Recruiting inside candidates has many benefits. Their strengths and weaknesses are known; they are committed to the company; morale of the company will increase; and they" needless orientation and training. Internal recruitment has also its demerits. Unsuccessful internal candidates will be discontented. Telling the unsuccessful applicant why he was rejected and what remedial actions he should take to be more successful is crucial (David Dahl and Patrick Pinto, 1977).

Interviewing a large number of unsuspecting inside candidates can be a waste of time while the management will precisely know in advance who among them the management would select. The insider appointed to a higher post may not be able to command respect or exercise authority as he is "one of the gang" (Jeffrey Daum, 1975). Another drawback of inbreeding is the tendency to maintain status quo.

Many firms preferring internal candidates like IBM, Delta Airlines went outside for CEOs in the 1990s when their boards decided they needed new vision and leadership, Injecting new blood is needed to rejuvenating an organization. Through external recruitment the firm will have the benefit of new skills, new talents and new experience it helps fulfil reservation requirements and scope for internal employees' resentment, heartburn can be avoided (K. Aswathappa, 2008) .

Re-hiring former employees is a trend witnessed in recent times. Earlier they were untouchables. With the economic boom attrition rate was high particularly in technology intensive firms. To meet the sudden spurt in expansion, some of the

companies came out with advertisement for hiring former employees including the retired ones.

To prepare for recruitment "job specifications" have to be, fixed. This is also called "man specifications". It is a statement of human qualifications necessary to do the job (Dale. S. Bench, 1980). The elements of job specifications consist of physical, mental, emotional, social and behavioural specifications.

The possible methods of recruitment are grouped into three categories: direct, indirect and third party (Dunn and Stephens, 1972): In direct method recruitment from campus and professional associations is included as the recruiter will visit them. Under indirect method advertising in various media is Considered Employment Exchanges. Employee referrals and consultants are part of third party sources.

Selection process evaluates the qualifications, experience and other qualities of an applicant with a view to matching these with the job requirements. The process involves rejection of less suitable or unsuitable applicants. Selection is negative as it seeks to eliminate as many-unqualified applicants as possible in order to identify the right candidate (Thomas H. Stone, 1989).

Information from the candidate is solicited on a plain paper or in a structured format. From initial scrutiny and suitability, candidates can be called for further process. Selection is a long process, commencing form preliminary interview of the applicants and ending with the contract of employment (R.Wayne Mondy and Robert M. Noe, 1981). Selection test for measuring job knowledge, intelligence, aptitude and personality can be administered depending on the job. It should be noted that the tests at best can reveal that those who have scored above the cut-off point are likely to be more successful than others and do not make a 10.0per cent prediction of candidates on the job success.

A selection test must be 'reliable' and 'valid' otherwise there is no logic to continue using it to screen the job applicants. Reliability refers to standardization of the procedure of administering and scoring the test results. A person who takes a test one day and secures a certain score should score more or less the same score when he takes the test sometime later (K. Aswathappa, 2008). Invalidity there are two types, viz, 'criterion' and 'content', Criterion validity demonstrates who do well in the test will also do well on the job and that those who do poorly in the test will do poorly on the job (Bureau of National Affairs, 1978).

The content validity of a test is demonstrated by showing that the test constitutes a fair sample of the content of the job (Ledvinka, 2004).

Personal interview is the most universally used tool in the selection process. An Interview is a conversation with a purpose between one person on one side and another person or persons on the other. An employment interview should provide an appraisal of personality by obtaining relevant information about the candidate's background, training, work history, education and interests. The candidate should also be given information about the company, job and policies. There are several types of interviews to aid the selection process.

The candidates selected are offered appointments after physical/medical examination indicating the details of the offer.

Outsourcing is an element of overall business strategy. If short term view of cost cutting guides such outsourcing the overall result may not be good. 1tis a unique feature in India that a law on contract labour is in force. The emerging view is that in core activities, outsourcing must not be resorted to. In non-core areas outsourcing is advised as a cost effective method on' account of flexibility. Outsourcing is criticized as exploitation. However, business process outsourcing has emerged as a significant area.

In India, organization groups such as L&T, Reliance, Tata, and Birla have implemented best recruitment and selection methods in a very professional manner using psychological tests and assessment centre approach. Institute of banking personnel selection (IBPS) and Most of the Oil & Gas Sector PSUs recruit graduate engineers through worldwide well accepted GATE Exams. Many Recruitment consultants have popularized the use of professional and scientific approach to recruitment and selection of employees in the industry.

- **Purpose of Recruiting**

Recruitment refers to the process of attracting, screening, and selecting qualified, trained and experienced people for a job. For some components of the recruitment process, large-size organizations retain professional recruiters or outsource some of the processes to recruitment agencies and/or train their HR managers for the same.

Edwin B. Flippo (1961) defined recruitment as the process of searching prospective employees and stimulating them to apply for jobs in the organization.

Some organizations use employer branding strategy and in-house recruitment instead of agencies. Recruitment functions are generally carried out by an organization's human resources personnel.

Recruiting the right person for a right job is a time consuming and lengthy process especially for senior positions. Recruiting must start with thorough assessment of immediate staff requirements.

- **Process of Recruitment**

Depending on the position, right sourcing strategy needs to be adopted. Sourcing strategy includes the decision of choosing one or more of the sources of recruitment mentioned below. Identifying a wrong source for recruitment would often delay the process. Hence the HR/functional managers need to take active interest in identifying the right sources at the first stage which would then begin the process of recruitment.

Sourcing involves:

Advertising, a common part of the recruiting process, often encompassing multiple media, such as the Internet, general newspapers, job advertisement in employment special newspapers, professional publications, and campus recruitment programs; and Recruiting research, which is an identification of talent who may not respond to job postings and other advertising methods. This initial research for passive prospective candidates results into a list of persons who are then contacted to seek their interest in the position, obtain a resume, and be screened.

- **Techniques /Sources of Recruitment**

The process of recruitment would rely upon the identification of right sources of recruitment. The entire recruitment is based on the goal of providing a candidate to a client for a cost. There are agencies that are paid only if they deliver a candidate that successfully stays with the client beyond the agreed trial period.

Specialized recruiters exist to seek staff with an especially fine area of expertise or specific skill set. These special firms tend to be more focused on building ongoing relationships with their candidates as the same candidates are placed many times throughout their careers. Niche firms also develop knowledge on specific employment trends within their industry of focus (e.g. the energy, oil & gas, electronics industry, chemical, automobile etc.).

Despite trying all sources of recruitment, sometimes, the employers are not likely to get the right candidates they are looking for, or they land up getting the poor performers, or those who quit very soon. Hence recruitment remains an all-time a demanding exercise for HR departments to balance the manpower requirements across the organization.

- **Factors Affecting Recruitment**

There are several factors that would influence recruitment depending upon its three phases as mentioned below. The recruitment of the employees is done as per the procedure explained in the Policy. To understand the effectiveness of the recruitment procedure, it is essential to know the different stages involved before and after the recruitment.

Phase I: (Before Recruitment)

- Sanction of the post.
- Calling in for CVs.
- Short listing.
- Written Test Mathematical/ Psychological/ English/ General Knowledge
- Interview Calls.

Phase II: (Recruitment Process)

- Short listing / Selection.
- Medical Check-up.
- Filling up of Salary data.
- Antecedent check.
- Appointment Letter.
- Collection of required documents/certificates.

Phase III: (After recruitment)

- Induction and Orientation of the employees

All these three stages affect the quality of recruitment, hence this needs to be followed very stringently.

- **2.9.6 Career Planning & Growth**

Career Planning & Growth refers to who, on the basis of performance evaluation, should fit into higher assignments (N. N. Chatterjee, 1980). Organizational career planning is the planned succession of jobs worked out by a firm to develop its employees (Angelos Denisi and Ricky W. Griflin, 2006). The management has a picture of the succession plan and the potentials of individuals, for future manpower needs caused by retirement and other casualties. To satisfy the aspirations for growth career ladders have to be formulated. Both lack of promotion, and too rapid promotion are bad. It is advisable to maintain an age balance (Peter, F. Drucker, 1974).

People do not want to work on dead end jobs; they want to move upwards in the organization. Hence a career ladder with clearly defined steps becomes an integral component of HR. Career planning is important because it would help the individual to explore, choose and strive to derive satisfaction with one's career object.

People are a renewable corporate resource, not an expendable one (Dr. Paul Schumann, president of Global Vantage in Austin, Texas). The emerging work culture has as a norm encouragement, of career or human resource development (Philip R. Harris, The New work Culture 1998).

Careers today are not what they used to be. Traditionally it was viewed as an upward, linear progression within a profession. Yesterday employees exchanged loyalty for job security. Today employees exchange performance for learning and development that will allow them to remain marketable (Sherry Sullivan, William Cardon and David Martin, 1998). Now one's career is driven by the person himself, not the organization from time to time (Douglas Hall, 1996). Therefore employees' long run interests have to be kept in view while devising Career Planning & Growth schemes. In career planning, organization has to prevent reality shock which occurs when a new employee's expectations do not match with the realities of job; allow job rotation to gain more realistic picture and provide mentoring for appropriate advices. Opportunities for networking and interactions among diverse employees can also be effective (Belle Rose Ragins, 1997). Most people look forward to promotions which usually mean more pay, responsibility and job satisfaction. It may so happen that promotion process is not always a positive experience for either employee or

employer. Unfairness, arbitrariness or secrecy can diminish the effectiveness of the process.

The important decision is whether to base promotion on seniority or competence (merit) or some combination of the two. Today's focus on competitiveness favours competence. It is a superior motivator. However, several things like union agreements, government regulations impact on company's ability to use competence as a criterion. Union agreements may state other things being equal seniority shall be the criterion (Daniel Quinn Mills, 1986).

To measure competence, prior performance is used as a guide, the assumption being if he has performed well now he will do so in the new job. Use of tests or assessment centres to identify executive potential is also in practice. Some firms adopt informal process where the manager will decide who should be promoted. Here familiarity more than performance counts. In formal process organizations publish promotion policies and procedures. This is a transparent process where employees' satisfaction is expected to be high.

Career Planning & Growth schemes take several models. They can be discipline specific within an organization; promotion to higher levels with responsibility andpay or change in title and benefit without higher responsibility. Each organization's plan depends on its work requirements, industry norms and other considerations for growth, attrition rate and other unit specific issues.

Career Planning & Growth schemes are important in the context of Employee Engagement. If it is not handled properly, it will impact on the morale and performance in an organization.

- **2.9.7 Employees Engagement**

The term Employee Engagement has been often misunderstood or poorly implemented by HR professionals. It is mainly for this reason that HR could not link with business.

Employee Engagement movement should be based on business needs. It is time and again disputed that employee engagement is one of the most efficient instruments towards achieving lasting business success. The organizations with employees to share thoughts on regular basis are more likely to have an effective program. Employee engagement program can go wrong if it lacks genuineness or legitimacy.

The straightforward but challenging steps to follow for an unbeaten employee engagement program are: connect engagement efforts to core business vision and policy; leverage peer-to-peer influence to create social synergy; persuade employees to choose goals related to their own lives achievable on a daily basis; promote involvement and allow all employees contribute; and push continuous success as a drive through weekly meeting, recognition and annual award ceremony. A grand engagement program is a certain way to retain talent in an organization.

Over the last couple of decades, employers' focus has moved from employees who are satisfied with pay, benefits and working conditions to those who are genuinely and meaningfully engaged in the work and mission of the organization and to those who are committed to the organization (Armstrong, 2006).

Commitment to an organization, a relationship, a goal, or even an occupation involves emotional attachments. Porter, Steers, Mowday and Boulian (1974) proposed that organizational commitment includes three elements:

- ✓ A sense of identification with the organization's goals.
- ✓ A feeling of involvement in organizational duties.
- ✓ A feeling of loyalty to the organization.

Employee engagement is defined as a heightened emotional connection that an employee feels for his or her organization that influences him or her to exert greater discretionary effort to his or her work (Melcrum, 2007).

According to Derek Stockley (2005), employee engagement refers to the extent that employees believe in the mission, purpose and values of an organization and demonstrate that commitment through their actions and their attitude towards the employer and customers.

Employee Engagement is as a state of mind in which employees feel a vested interest in the company's success and are both willing and engaged to perform to levels that exceed the stated job requirements (Landy and Conte 2005).

An engaged employee is a person who is fully involved in, and enthusiastic about, his or her work. It is a belief about one's current job and is a function of how much the job can satisfy one's wishes. Highly job involved individuals make the job a central part of their personal character. Besides, people with high job involvement focus most of their attention on their job. The engagement-performance potential is present in the organization means delivering the results in a shared effort' (Holbeche, 2013). Job

involvement is defined as Psychological identification with a job. This definition implies that a job-involved person sees her or his job as an important part of his self-concept (Lawler & Hall, 1970). —Jobs are defined as one's self concept in a major way| (Kanungo, 1982).

Job involvement has been clearly linked to absenteeism (Blau, 1986; Farrell & Stamm, 1988; Shore, Newton, & Thornton, 1990; Scott & McClellan, 1990), and to turnover or intent to leave (Baba & Jamal, 1991; Huselid & Day, 1991; Ingram, Lee, & Lucas, 1991; Shore, Newton, & Thornton, 1990). The well-documented correlate of job involvement is an organizational commitment.

- **2.9.8 Training and Development**

The training and development function enables employees to acquire skills and knowledge to perform their jobs effectively. Training is essential when the job undergoes change or new technology is adopted. Before redeployment to combat stagnation or surplus, training is useful. Any activity intended to improve people's capability to perform a work-task by means of improving their skills or increasing their knowledge is training (Toily Newby, 1998). Training is the process of imparting specific skills, abilities and knowledge to an employee (K.Aswathappa, 2008). Employees are assured of their capabilities upon reinforcement through training and development programmes.

Training is a vital element of any corporate strategy (Buckley and Capell, 2000). Similarly company should link training to its objectives and strategies (President and CEO of ASTD, 2003). Training is a part of overall business cycle (wills, 1993). Company should assess the current and future needs of business for determining training. For successful implementation of business strategy, training plan must eliminate skill deficiencies. Employees to be effective should to perform their jobs at a reasonable level of proficiency.

Organization must provide opportunities for continuous development of employees not only to perform the present jobs but also jobs in the near future (Gerson and Gerson, 2006).

Therefore institutions must become learning organizations. The complexities and competitiveness of the global market require a collective and collaborative work environment not just grand strategist at the top (Peter Senge, Fifth Discipline, 1990).

Such organization empowers all persons to learn so they gain personal mastery through systems thinking and team development.

New technologies are driving the redesign of organizational roles and responsibilities. Personnel have to be prepared for these new roles. With robotics and computerisation there will be fewer people at work but they will have higher qualifications and-competencies. In such circumstances, self-directed learning projects covering a variety of topics and educational resources will be helpful (R. G. Rumelt and R. Newson, 1981).

Earlier training used to focus mostly on teaching technical skills (Caroline Wailey, 1993). Today employers have to impart training to adapt to technological change, improve product and service quality and boost productivity to stay ahead (Caroline Wailey, 1993). Apart from knowing charts, graphs and analysing data, employees would need skill in team building, decision making, communication and computer skills (Harley Frazis et al, 1995). It is important to have a business justification of training initiative which should estimate return on investment of training (McArdley, 1999).

It was customary to distinguish training from development. Training was taken to imply "to educate somewhat narrowly, mainly by instruction, drill and discipline whereas development implied a process for growth and maturisation (Dale Yoder, 1967). Development refers to those learning opportunities designed to help employees grow (Jowher H. Bernardin and Joyce E. A. Russel, 1993). To shoulder higher responsibilities organizations have development programmes. Training was supposed to cover workers and development managerial personnel. However, this distinction has been questioned. The types include induction training, supervisory training, technical and management development. There has been a preference for on the job trainings for workers. Supervisors and managers are sent for classroom training. It is not uncommon for management to send workers also for long term training such that the benefit is reaped for several years.

Training and development aim to provide skill development, example, computer skills, knowledge development, say latest changes in industrial, labour low and attitudinal change, for instance, preparing for merger and takeover.

Important training needs may have to be identified through a number of ways. It includes training audit, identification projects, job training analysis (Kennedy and Reed, 1986).

Training and development of employees is attracting increasing attention (Kleangratner and Anderson, 1987; Tannenbaum and Yukl, 1992). The importance of tying training to strategic business planning has been stressed (tichy et al, 1982, Hendry and Pettigrew, 1990 and Schuler, 1992).

HR is seen to be a vital factor in corporate planning and training and development is capable of making an important contribution to the achievement of business (Ashton and Felstead, 1995). According to Maybey and Salaman, (1995), training is strategic priority, it should act as a catalyst for change, it should give the organization a competitive edge and promote a learning climate in the organization, The business success of leading organizations like Motorola, General Electric and Hewlett Packard is attributed to systematic employee training (Catala Nello and Redding, 1989). A number of companies in Britain were also seen to be integrating training and development into their planning (Keep, 1989). In Canada, a survey revealed that education and training have been rated as important factors for improving international competitiveness (Clarke, 1992). In India many leading organizations have their own training facility or send employees for external programmes. For the industry being studied in this research (power industry), Government of India have formulated National Policy for the Power Industry (2001).

- **2.9.8.1 Benefits of Training**

Training and development has win-win outcomes for both employees and employers. Strategically targeted training in critical skills and knowledge base adds to employee marketability and employee security (Jeffery A Mellow, 2007). Training helps workers assuming varied responsibilities which improve the bottom line. Eventually de-layering of management and making employees more accountable for results are possible. Training can make an impact in succession planning, work methods improvement, material control, hygiene and safety and enhanced sales (Buckley R, 2004; Hurlay P; 2005, Harris P, 2005). Research has also confirmed that training can improve courtesy and employee attitude transformation (Karnikeya, 2004; Goyal, Sharma and Jauhari 2004).

Training can increase job satisfaction as the task performed after training will be better. A research at Xerox found that post training New Castle branch of Xerox became the top branch in terms of sales and those sales calls to get and order had virtually halved to twenty four.

The definitions given below helps us understand training:

Taylor (1961) conceptualized training as:

A means to bring about a continuous improvement in the quality of work performed, it would equip them with necessary knowledge, skills abilities and attitude to perform their jobs.

Chowdhry (1986) remarked:

'Training is a process, which enables the trainees to achieve the goals and objectives of his/her organizations".

- **2.9.8.2 Need Assessment**

Needs assessment diagnoses present problems and future challenges to be met through training and development (William and Keith Davis, 1993). The essence of a training need is a gap between what exists and what is needed for optimum performance. When training is designed in response to such a need several positive results follow: training content relates to job realities; people undergo training are much more likely to see the activity as useful and relevant and therefore learn more readily; on the job performance improves; and measurement of improved performance becomes more feasible (Tony Newby, 1998). The first step involves determining why specific training activities are required. The assessment is made at organizational, task and individual levels. How training will assist the organization meeting its objectives will be examined at organizational level. Task level assessment involves looking at specific duties and responsibilities assigned to different jobs. Learning on or away from the job will be found out. At individual level, it considers the people to be trained. Takes note of the existing levels of knowledge and skills, personality and inter-personal styles in the design and delivery of training. Fairbairns (1991) speaks about two aspects of needs analysis:

(1) What skills, knowledge and personal attributes are important in one's job?

(2) What skills, knowledge and personal attribute one is in need of training.

- **2.9.8.3 Training Objectives Steps**

The objectives must follow directly from the assessed needs and be described in specific measurable terms. It should state the desired employee behaviour as well as the results that are expected to follow such behaviour. The difficulty will arise if the organization's objective is vague. And consequently the training objective cannot be evaluated. If training programmes cannot be evaluated it will be of little value in the long run. Training objectives should be written precisely such that what trainees are able to be able as a result of their learning (Buckley and Jim, 2004).

Training programmes consist of five steps. These are is needs analysis, instructional design, validation, implementation of the programme and evaluation (Gary Dessler, 2004). According to Craig (1976) there are seven steps. These are identification of training needs, developing training objective, designing training curriculum, selecting training methods, designing evaluation methodology, conducting the programme and measuring training results.

- **2.9.8.4 Design and Delivery**

Two critical issues must be kept in view in designing training programmes. The first is interference. It occurs when prior training, learning for established habits acts as a block. The more experience someone has the more difficult it may be to modify the response they display. The second issue is transfer. It is the extent to which the trainee is able to transfer the learning to the actual job setting. External training (away from job) suffers from this deficiency in as much as transfer is insufficient. On the job training helps to maximize transfer. But it is obviously not feasible for all jobs. Off the job training minimizes interruptions. The techniques used now attempt to stimulate what happens on the job. Simulated training for power plant operation is a case in point. Simulation provides learners with an atmosphere in which it is safe to fail (Salopek, 1998)

Business games have assumed an important role in education and training for industry and commerce (Patra, 2003). Training methods that are interactive, emotionally involve the participants and connect the trainee with reality are more effective (Singh and Perdue, 2002).

Online training is becoming popular now. A survey conducted of 100 companies with an average of 15,000 employees found that 42 per cent were currently using online learning applications. More importantly 92 per cent of the respondents planned to introduce online training with in next 12 months (Anonymous, 2000).

- **2.9.8.5 Evaluation**

After the training has been delivered, it needs to be evaluated. The organization should receive feedback on training and decide whether it should be continued, modified or stopped. The evaluation criteria should be assessed prior to training delivery to provide a comparison basis for post training assessment.

Evaluation techniques should be developed at the time when training objectives are set. One model suggests the evaluation at four levels. These levels are reaction, learning, behaviour and results (Krick Patrick, Donald, 1994). Reaction measures whether the employees liked the training, the trainer and the facilities. This is obtained through feedback forms. Learning measures whether employees more than they did prior to undertaking the training. This is measured by tests or demonstrations. Behaviour measures what employees do on the job after the training. It finds out whether transfer has taken place and if employees are able to do things differently. Performance appraisal is used here. Evaluation of results look at the overall outcome of the training on productivity, efficiency, quality, customer service or any other means the organization may decide.

- **2.9.8.6 Role of Line Mangers in ER**

All managers are, in sense, ER managers since they all get involved in several activities of ER (Gary Dessler, 2004). Managers are responsible for optimizing all of the resources available- material, capital and human (Campbell J.P. and Dunnatte M.D. Lawler, EE III Week K.E.Junior, 1970). It has been gradually realized that works managers is as much concerned with the personnel management as the chief personnel officer (N. N. Catterjee, 1980).

The activities of staffing, retention, development and adjustment are the special responsibilities of HR department. But, these responsibilities also lie within the core of every manager's job because line managers have authority and they have considerable impact on the ways workers actually behave (Wayne F. Cascio, 2006).

ER Provides the technical expertise while line managers use this expertise to manage people effectively. For instance, line managers have to treat employees fairly, promote team work and recommend pay increases, whereas, ER department will devise a fair compensation system leading to retention of people. The direct handling of people is, and always has been an integral part of every line manager's responsibility, from president down to the lowest level supervisor (Paul Pigors, Charles Meyers, and F.P.Maim, 1969), in small organizations, line managers may carry out all personnel duties. But as the organization grows, they need the assistance, specialized knowledge and advice of a separate human resource staff (BNA Bulletin, 1998), Distinction of which HR management activities should be handled by line managers and which by staff managers across the company cannot be made. But we can make some generalizations (BNA Bulletin, 2000). Line managers for example, indicate the qualifications of persons to be appointed and the HR staffs handles the remaining process towards recruitment. Likewise in various other functions, the role of line managers in ER management becomes complementary

2.10 Research Gap

From the time Study of Best Practices was recognized as a useful management tool, one or other ERM function was also considered for Study of Best Practices. Wage level, training and staffing were some of the commonly examined subjects under Study of Best Practices. Bogan and English say, many Study of Best Practices projects had targeted critical technical functions such as, distribution and logistics, billing, order entry and fulfilment, and as an advanced concept, it was also applicable to higher level functions such as, strategic planning, restructuring and joint venture management. Later, exclusive benchmarking exercises in HRM functions were also carried. International Game Developers Association, in 2003, carried out a study on human resource practices, a study of international best practices. In Australia, among the library services, benchmarking exercise in HR was undertaken (Ian Smith, 2006) The popular Malcom Baldrige Quality Award required compliance on certain elements of HRM. Suggestion was therefore made to carry out benchmarking of HRM functions under this Quality Award framework.

The earlier exercises relating to benchmarking HRM functions in energy industry can be traced to the work done in Nuclear Electric, UK and Florida Light and Power, USA.

Nuclear Electric, UK through study of best practices established its strategic framework for the performance goals in the areas of manageable cost per unit of production; number of staff and output per employee. It also made external benchmarking in areas like outage management, safety management and health physics. Florida Light and Power, LISA formed its quality plan that encompassed the principles of customer satisfaction, plan-do-check-act (PDCA), management by fact and respect for people.

In our country, the study of best practices tool was used by many organizations. Informal study of best practices was more in practice in oil & gas industry. It related to performance parameters and staff and wage levels. A best practices study conducted on HR functions in pharmaceutical industry by Nitin Vazirani has covered HR and strategic plans, organizational climate, training and performance management. It is a limited study covering only a few aspects of HR and the respondents were only managers who were in one city. The workers were not covered under the study.

Literature about formal best practice study of HRD functions in oil & gas industry is not traceable. It has been ascertained that National Productivity Council of India took upon itself the responsibility of spearheading study of best practices / benchmarking movement in the country. A separate cell was learnt to have been formed for this purpose. However, it could not make headway as little response was forthcoming from the industry. Consequently the cell has been wound up now.

An effort has been made to find out whether similar study has been undertaken earlier. The purpose was to review such study in case it was made and to identify gaps if any. A digital search was made through world web like Ebsco and Emerald but similar literature could not be found. Further, from a search made in the Rajasthan University, Indian Institute of Management and Aligarh Muslim University, it has been noticed that neither a similar study nor a closely related study has been made. It is in this background that this research fills the gap.

CHAPTER - III

RESEARCH METHODOLOGY

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

Research includes any gathering of data, information and facts for the advancement of knowledge. C.R.Kothari (1990) says research is a scientific and systematic search for pertinent information on a specific topic. Research is purposive; it seeks to answer specific questions and is not merely an accumulation of unstructured observation (C.B.Mamoria, 2008). Swain A.K.P.C (2008) defines: "Research is an endeavour to discover facts by scientific method and is a course of a critical investigation".

There are three categories of research, namely, exploratory, descriptive and experimental. This classification is based on the type of information required and the extent of relevant subject knowledge available at hand. Exploratory research pursues several possibilities simultaneously and designed to provide a background, to familiarize and explore the general subject. For descriptive research one must collect data for a particular purpose. It allows both implicit and explicit hypotheses to be tested depending on the research problem. Experimental research will refer to that process of research in which one or more variables are manipulated under conditions which permit the collection of data that show the effects.

Business undertakings operate in the world of uncertainty. By applying appropriate research methodology the degree of uncertainty can be minimized. It reduces the probability of making a wrong choice among alternative courses of action. Research methodology is the way in which data are collected for the research project. It is the systematic way to solve the research problem. In this research the exploratory approach is followed. So far as Human Resource Development is concerned, Basic details about the employee, Employee satisfaction survey, The reasons for attrition , HR retention policies of your company.

3.2 Objectives

The broad objective of this research is to study the Human Resource Development practices followed by selected OIL PSUs organizations and ascertain the best practices. The specific objectives of the research are:

- To examine why retention management is important
- To understand the human resource policy of the retail units in Nagpur
- To study the causes of attrition, turnover and other related issues.
- To reveal the various loopholes in the retention management strategies if any

3.3 Statement of Problem

In several instances Study of best practices exercises were carried out in operations or customer focus. Study of best practices projects carried out in US and Europe had covered of HR functions as a requirement under the framework of Malcolm Baldrige, Deming Award or Australia Quality Awards. Some organizations had carried out exclusive study exercises in human resource management.

There used to be exchange of information on operation parameters, maintenance norms and staff pattern and comparisons were made when managers, in-charge of utilities met in different forums. Also Training & Development information was shared among certain utilities for adopting better learning atmosphere. One of the OIL & Gas Sector PSU namely, GAIL (India) Limited is organizing a national conference on best practices in Operation & Maintenance during Every Year Since 2012. Several papers on the best practices adopted in operation and maintenance of plants, project management, financing, renovation and modernization, environment management and HR were presented.

Until the reform process was set in motion, profitability or competition was not an issue for state utilities. Also the energy projects were executed on state funding and supply of oil & Gas has been less than demand. Consequent to reforms, most of the

states have unbundled their utilities. Each state has refining company, petrochemical company and Marketing Company. The purpose is to stem the inefficiencies in these segments by infusing competition. When a commodity is in short supply, there is little incentive for performance improvement. With the new ' legislative framework, private players backed by professional expertise are now entering the Oil & Gas sector. In this new scenario technological balance each organization in the sector has to consciously plan and implement measures that will enhance its performance. HRD is recognized to be one of the key components that will enhance performance. This research aims to carry out an exploratory study to identify the practices followed in human resource development functions in the public sector organizations of Oil & Gas industry and as certain the best among them.

There is a perceived void in formally understanding and comparing the practices followed in Human Resource Management. In most of the utilities HRD function was not, until recently, established as a specialist function. As such, necessary literature or information relating to various aspects of human resources development was not properly developed.

In India, there is a clear surge in Man Power Demand in Oil & Gas sector which is unlikely to be met by current supply of trained personnel of the sector. Demand is slated to grow in coming years, with Shell's technology centre in Bangalore expected to hire nearly thousand employees to support its global operations, both upstream and downstream. Furthermore, with Reliance Industries Ltd planning to doubling refining capacity by next few years, Essar Oil starting production at its refinery and planning to have approximately 5,000 retail outlets by 2015, Cairn Energy ramping up manpower to enhance the commercial production and the PSU oil and gas companies themselves planning to invest heavily in their Five-Year Plan to expand their operations, it is likely that the oil PSUs will find themselves facing a talent crunch in the near future. The severity of the problem is highlighted by the case of EIL, an organisation known for its consulting services in oil & Gas Sector. EIL's attrition rate in 2010-11 in the Process Design and Development function has been as high as 21.4% and in project management and project services functions, it is 17.2%. The trend for next years has been even higher. Thus it is certain that oil & gas companies are going to infuse huge fresh man power in near future through new recruits & to make them workable in the industry, HRD is going to be a key area in coming years.

Thus a study of current HRD practices in Oil Sector Companies becomes inevitable to make the practises more robust

In the absence, of identifying best practices, the public sector may not be able to effectively face the competition. This problem is sought to be remedied by instituting a formal study on the Oil & Gas sector HRD practices currently in place. While the study will cover all the major aspect of HRD, however it is not feasible to carry out the research work on Training & Development practices of every level of employees in one research project so the study of Training & Development practices in this research will remain focused on Non- Managerial employees only. Additionally it has been found that although non managerial employees comprise of almost half of the overall manpower but there is almost negligible study undertaken on Training & Development Practices of these staff cadre. This given us an enough scope to undertake an in-depth study. Similar studies in other functions of Oil & Gas organizations can provide multiple advantages.

Study of best practices has been credited with effecting dramatic turnarounds for companies in trouble and generally improving competitive positioning (Rogers Dale S, 1995). In the last three decades, several organizations have successfully implemented benchmarking projects based on these studies with enormous benefits. They attained internal performance enhancement and could effectively meet competitors challenge, secure higher market share and ultimately achieve specific bottom line increases. Study of best practices can be applied to any business process or function.

As human resources are admittedly the key resource for the success of any business, study of HRD practices can be of immense use. Study followed by benchmarking can be a very cost-effective method for making dramatic improvements in human resource process, according to Jac Fitz-enz, (1993), one of the gurus of human resource management.

In several instances study of best practices exercises were carried out in operations or customer of focus. Benchmarking projects based on these studies were carried out in US and Europe had covered some elements HR functions as a requirement under the framework of Malcolm Baldrige, Deming Award or Australia Quality Awards. Some organizations had carried out exclusive study in human resource management.

Until the reform process was set in motion, profitability or competition was not an issue for state utilities. Also the oil & gas projects were executed on state funding.

Consequent to reforms, most of the state companies have unbundled their utilities. Now these are classified as up-stream mid-stream and down-stream companies. The purpose is to stem the inefficiencies in these segments by infusing competition. When a commodity is in short supply, there is little incentive for performance improvement. With the new legislative framework, private players backed by professional expertise are now entering the oil & gas sector. In this new scenario each organization in the sector has to consciously plan and implement measures that will enhance its performance. HRD is recognized to be one of the key components that will enhance performance.

There is a perceived void in formally understanding and comparing the practices followed in Human Resource Development. In most of the utilities, HRD function was not, until recently, established as a specialist function. As such, necessary literature or information relating to various aspects of human resource development was not properly developed,

In the absence of identifying best practices, the public sector may not be able to effectively face the competition. This problem is sought to be remedied by instituting a formal study on the HRD Practices in Selected Oil & Gas Public Sector Undertakings, where HRD practices currently in place. Similar studies in other functions of oil & gas organizations can provide multiple advantages.

3.4 Hypotheses

The following null hypotheses have been formulated in respect of this study:

Ho1 There is no significant relationship between manpower planning and overall best practice in four Oil & Gas Sector organizations.

Ho2 There is no significant difference among the four Oil & Gas Sector organizations in manpower planning.

Ho3 There is no significant relationship between manpower Selection & recruitment process and overall best practice in four Oil & Gas Sector organizations.

Ho4 There is no significant difference among the four Oil & Gas Sector organizations in manpower Selection & recruitment process.

Ho5 There is no significant relationship between Career Planning & Growth and overall best practice in four Oil & Gas Sector organizations.

H06 There is no significant difference among the four Oil & Gas Sector organizations in Career Planning & Growth schemes.

Ho7 There is no significant relationship between employee engagement level and overall best practice in four Oil & Gas Sector organizations.

Ho8 There is no significant difference among the four Oil & Gas Sector organizations in employee engagement level.

Ho9 There is no significant relationship between training and development practices for Non-Executives / Staff and overall best practice in four Oil & Gas Sector organizations.

Ho10 There is no significant difference among the four Oil & Gas Sector organizations in training and development of Non-Executives / Staff.

3.5 Sample Plan and Method of Data Collection

This research intends to focus on certain functions of human resource Development, namely, Manpower Planning, Recruitment & Selection, Career Planning & Growth, Employee Engagement and Training and Development (Focus to Non- executives training only). Data relating to various elements of these functions had to be obtained for the study. Keeping that requirement in view, a questionnaire was developed. Against each question, 5 choices were given as answers. The answers were "Strongly Disagree", "Disagree", "Undecided", "Agree" And "Strongly Agree". The corresponding score value was fixed at 1, 2, 3, 4 and 5. The respondents were required to mark one of the five choices as their answer. Using the questionnaire so developed a pilot study was conducted. The responses received for the pilot study was statistically analysed for reliability.

It was found that the alpha value was 0.92 which led to the conclusion that the questionnaire was highly reliable.

The four OIL PSU companies, amongst, GAIL, IOCL, BPCL, HPCL, ONGC and OIL were selected for the study. The selected 04 Oil PSUs together have a total work force of around 60, 000 employees. At a confidence level of 95%, with the confidence interval of 5, the Research info.com indicated that sample size will be 384. The Rao Soft.com provided the sample size as 384 for the population of 60, 000 employees at a

confidence level of 95% and margin error at 5%. Considering the possible non-responsiveness, the sample size was rounded off to 500.

Thereafter the questionnaire was administered on 500 identified respondents it was planned to have 500 respondents. 140 Each from GUC & OMC1 employees and from OMC2 & OMC3 110 employees each were identified as respondents to the survey questionnaires.. It was done with the assistance of links of qualified personnel in organization. The respondents were not required to write their names or sign the questionnaire and were not aware of the identity of the researcher. That was to ensure frank and unbiased response. In identifying these willing respondents care was taken to cover all disciplines, viz, civil, electrical, mechanical, instrumentation, design, human resource/administration, finance and accounts, materials, security, medical, commercial. Employees of various departments are the internal customers of Human Resource Development Function. Therefore representation from different departments/functions in these organizations was found necessary and complied with accordingly.

It may be noted here that in most cases Oil & Gas plants are located at places far away from the corporate or administrative office. The employees who expressed willingness were only covered in the survey. The support of senior/top management which included human resource as well as technical functionaries of these Oil PSU organizations was obtained for conducting the study.

As against 500 respondents covered, responses from 435 respondents were received. On a scrutiny, it was found that 20 responses were either incomplete or not properly answered and hence rejected. The remaining 415 responses were used for further statistical analysis.

Secondary information from government organizations like, Ministry of Petroleum and Natural Gas, Government of India, Professional/Trade Journals and websites was obtained to supplement the primary data. Discussions with senior functionaries of oil and gas organizations were also held and other required information/data obtained

3.6 Tools for Analysis

This research aims to carry out an exploratory study to identify the practices followed in Human Resource Development function in the selected 04 PSUs of oil & gas sector and ascertain the best among them.

The data collected was analysed using Statistical Package for Social Sciences (SPSS) Version 15.0. Some of the tools used for testing of hypothesis & analysis are: Analysis of Variance (ANOVA), Coefficient of Correlation. 't' test and Arithmetic Mean. To illustrate data diagrams, charts and graphs, MS office especially MS excel extensively used.

3.7 Limitations of the Study

The study is limited to Public Sector organizations in Oil & Gas Sector. Basically there are 13 nos. of Public Sector Companies of OIL & Gas Sector in India along with their partly or wholly owned subsidiary units involve in exploration, refining & marketing oil & natural gas in the country. However, each company have various plants & work locations, may have certain special issues depending upon the type whether Exploration, refineries or Marketing and other local factors. While the general approach in Human Resource Development can be expected to be similar plant specific issues may differ from one to the other. This study can only look at the common aspects among the Oil & Gas Sector.

1. The study is restricted only to Nagpur city.
2. It is difficult to contact the high level retail mangers and get of the details like the company's turnover, strategies, attrition rate and reasons, and their retention policies and procedures.

As the study cannot be made in all the Public Sector organizations in Oil & Gas Sector, only a sample is selected from 04 Nos. of OIL PSUs for the study. Again among them, an attempt has been made to cover the some offices as well as few work centres under the control of each of the organization selected for the study. Since state owned organizations are large in number and their dominance is expected to continue for quite some time, the private organizations are not covered.

Selection of the organizations, covered under this study is based on judgement, considering their performance they have been selected. There are other OIL PSU organizations that have performed better but are not covered under this study. It is quite possible that they may have practices better than the organizations now studied. The four organizations studied have vast geographical jurisdiction. Several offices & plants are owned by them. Only a few stations have been covered through a sample of employees. Uncovered regions may have practices of significance. This study is also limited by the knowledge and skills of the researcher particularly in the statistical area.

3.8 Contribution

In the context of emerging competition in the Oil & Gas segment and the sector's personnel having been sensitized to the imperatives of executing the projects on time without cost escalation and operating the plants at superior performance level it is hoped that a study of this kind will be of immediate use. Each OIL & Gas Sector company will be prompted be enabled to identify the areas for improvement and evolve suitable responses such that they can embark upon superior performance approach. As human resources are admittedly the key resource for the success of any business, study of Human Resource Development practices can be of immense use. This in turn can be utilised for benchmarking. Benchmarking can be a very cost effective method for making dramatic improvements in human resource development process, according to jac Fitz-enz; (1993), one of the gurus of human resource management.

CHAPTER - IV

DATA ANALYSIS AND INTREPRETATION

CHAPTER-4

DATA ANALYSIS, TESTING OF HYPOTHESIS AND INTERPRETATION

From four OIL PSU organizations, 100 respondents were identified and they were requested to furnish their response. Response from 100 respondents was received. Twenty responses were found to be incomplete or not proper and hence rejected. Thus the final tally of respondents was 100. All subsequent analysis is made with reference to these 100 respondents only.

In the preliminary state, a brief analysis of the response to each question is made. From this it may be seen that various elements of ER functions under study are in practice in the four OIL PSU organizations in terms of the perception of the respondents.

Question1: Manpower planning is an important process in your organization

Table 4.1: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 1

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1				9	9	2.17
DA	2				18	18	4.34
Undecided	3	20	15	7	9	51	12.29
Agree	4	44	8	24	36	112	26.99
Strongly agree	5	64	95	48	18	225	54.22
Total		128	118	79	90	415	100.00

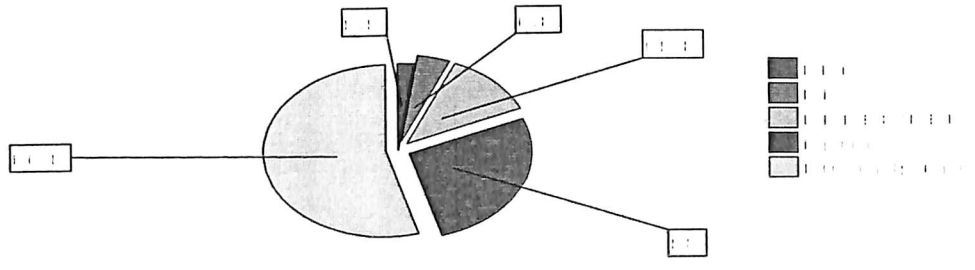


Fig. 4.1: Pie graph showing the percentage of responses of 415 respondents of four OIL PSU organizations in accordance to question 1

It is seen that from each organization, a majority of respondents have expressed 'agree' or 'strongly agree'. As high as 81.2 per cent of respondents have confirmed that manpower planning is an important process.

Question 2: In manpower planning, industry comparison (best practice) is made

Table 4.2: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 2

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1				9	9	2.17
DA	2	20		15	18	53	12.77
Undecided	3	23	8	8		39	9.40
Agree	4	83	54	24	45	206	49.64
Strongly agree	5	2	56	32	18	108	26.02
Total		128	118	79	90	415	100.0

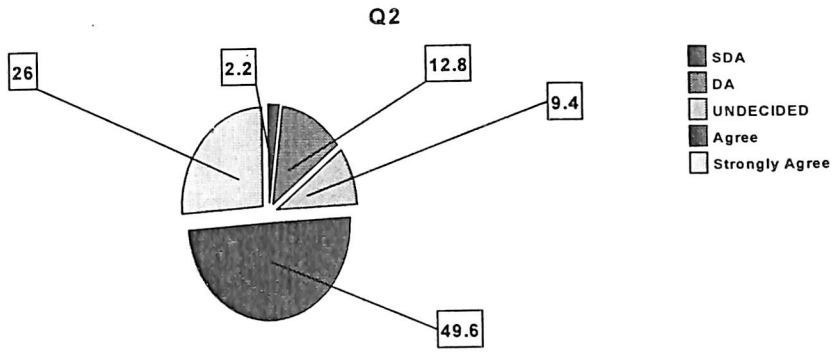


Fig. 4.2: Pie graph showing the percentage of responses of 415 Respondents of four OIL PSU organizations in accordance to question 2

It is seen that a majority of employees 67 have rated 'agree' or 'strongly agree'. 75.66 per cent has stated that such industry comparison is made. However, 9.4 per cent has remained undecided and 15 per cent has answered in the negative.

Question 3: In manpower planning, comparison (best practice) with industry abroad is made

Table 4.3: Table showing the responses of 415 Respondents of four OIL PSU organizations in accordance to question 3

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	19			36	55	13.25
DA	2	59	8	16	27	110	26.51
Undecided	3	24	40	24	18	106	25.54
Agree	4	25	38	32	9	104	25.06
Strongly agree	5	1	32	7		40	9.64
Total		128	118	79	90	415	100.00

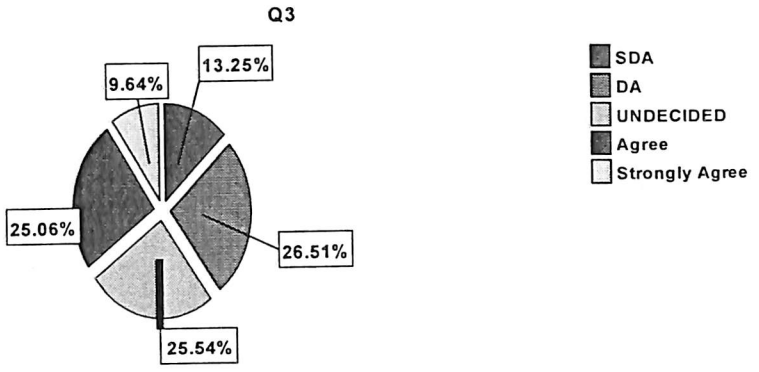


Fig. 4.3: Pie graph showing the percentage of responses of 415 employees of four OIL PSU organizations in accordance to question 3

While only 34.7% respondents have stated that they either agree or strongly agree with the question, a larger number i.e. 39.76% have expressed disagreement. Of them, employees of GUC and OMC3 have largely stated that they disagree. About 25.54 per cent has also remained undecided and therefore it appears that such international comparison is not being made.

Question 4: Manpower planning is made in consultation with all departments in the organization

Table 4.4: Table showing the responses 415 respondents of four OIL PSU organizations in accordance to question 4

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	59		23	9	91	21.93
Undecided	3	20	24	8	9	61	14.70
Agree	4	29	46	24	45	144	34.70
Strongly agree	5	20	48	24	27	119	28.67
Total		128	118	79	90	415	100.00

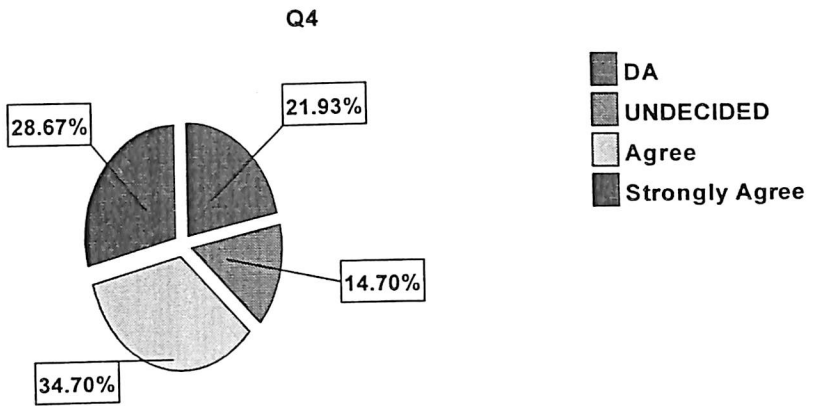


Fig. 4.4: Pie graph showing the percentage of responses of 415 respondents of four OIL PSU organizations in accordance to question 4

Around 63.37 percent has expressed "agree" or "strongly agree" endorsing the manpower planning is made in consultation with all the departments in the organization. This tendency is seen across all the four organization except GUC. While 21.93 percent has disagreed, 14.7 percent has remained neutral.

Question 5: Workload (job content) is assessed based on scientific methods

Table 4.5: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 5

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1		8	18	27	6.51
DA	2	39	15	16	9	79	19.04
Undecided	3	5	16	15	9	45	10.84
Agree	4	83	63	32	36	214	51.57
Strongly agree	5		24	8	18	50	12.05
Total		128	118	79	90	415	100.00

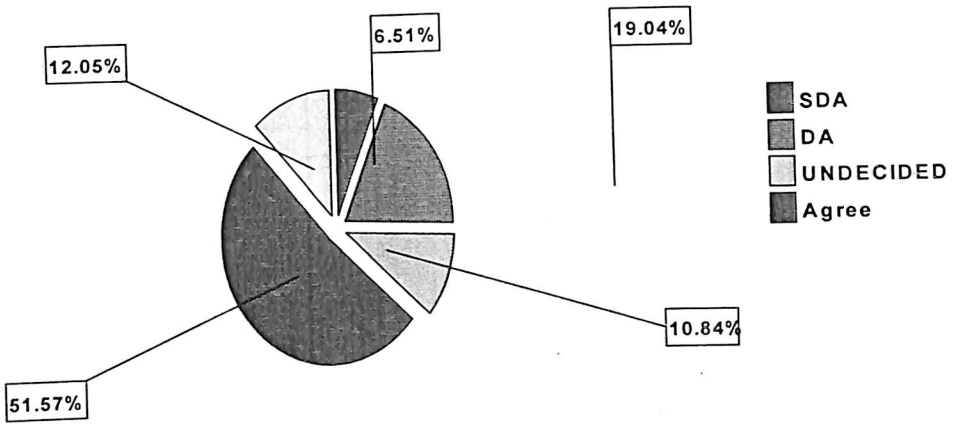


Fig. 4.5: Pie graph showing the percentage of responses of 415 employees of four OIL PSU organizations in accordance to question 5

Majority of employees either agree or strongly agree that the job content is assessed based on scientific method. Respondents of GUC & OMC1 strongly share this view. However, leaner majority of employees from OMC2 & OMC3 also think that work load is assessed based on scientific methods. In terms of the percentage score value around 62.62 percent is positive about the scientific assessment whereas around 25.55 percent feels otherwise and about 10.84 percent has no specific view.

Question 6: Qualification and skill sets of employees are clearly defined

Table 4.6: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 6

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1				9	9	2.17
DA	2	20	8	7	9	44	10.60
Undecided	3	20	23	24		67	16.14
Agree	4	64	48	40	36	188	45.30
Strongly agree	5	24	39	8	36	107	25.78
Total		128	118	79	90	415	100.00

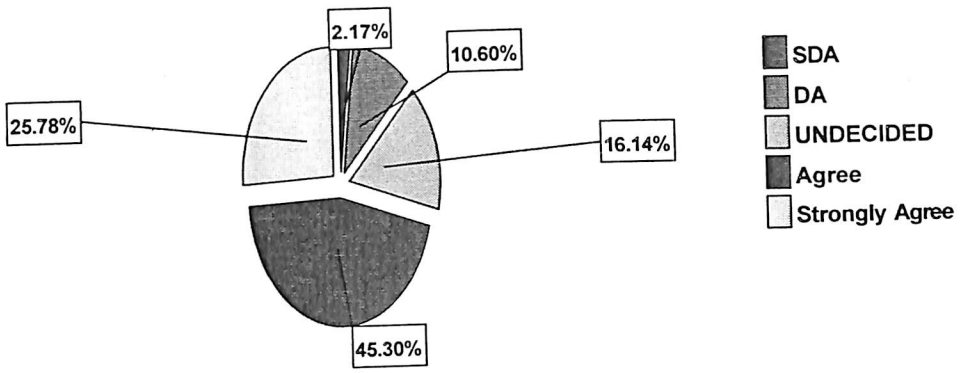


Fig. 4.6: Pie graph showing the percentage of responses of 415 respondents of four OIL PSU organizations in accordance to question 6

In response to this question as vast majority of respondents across all the four OIL PSU organizations does agree that the qualification and skill sets required for employees are clearly defined. Around 71.08 percent belongs to this category while about 12.77 per cent thinks that these are not well defined & 16.14% remained undecided.

Question 7: Staff is adequate

Table 4.7: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 7

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	21		15	36	72	17.35
DA	2	59		8	36	103	24.82
Undecided	3	2	23	16	9	50	12.05
Agree	4	46	64	40	9	159	38.31
Strongly agree	5		31			31	7.47
Total		128	118	79	90	415	100.00

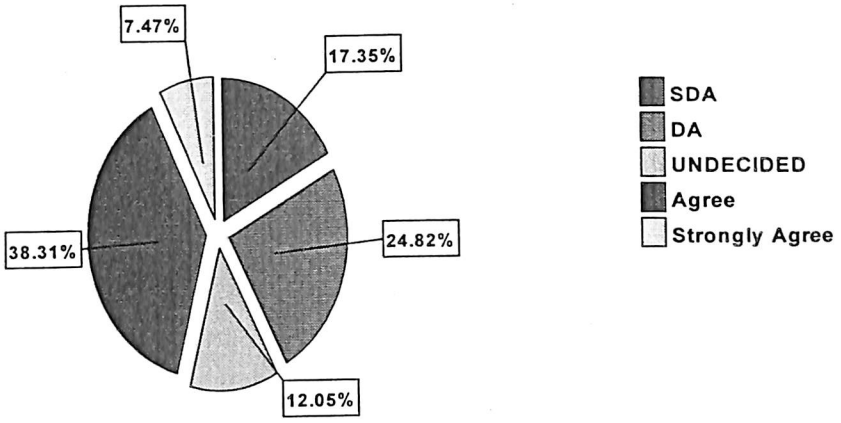


Fig. 4.7: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 7

It is seen that opinion on this matter amongst all the four OIL PSU organizations remain split while majority of overall respondents have expressed 'agree' or 'strongly agree'. However, a considerable portion of respondents have expressed either 'disagree' or 'strongly disagree'. Only about 46 percent agrees, about 12 percent has no specific opinion and the rest, over 42 per cent disagrees. Employees from GUC & OMC3 have expressed disagreements while employees from OMC1 & OMC2 have shown the agreement in large.

Question 8: Staff is excess

Table 4.8: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 8

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	82	47	39	27	195	46.99
DA	2	45	23	8	54	130	31.33
Undecided	3	1	32	32		65	15.66
Agree	4		16		9	25	6.02
Strongly agree	5					0	0.00
Total		128	118	79	90	415	100.00

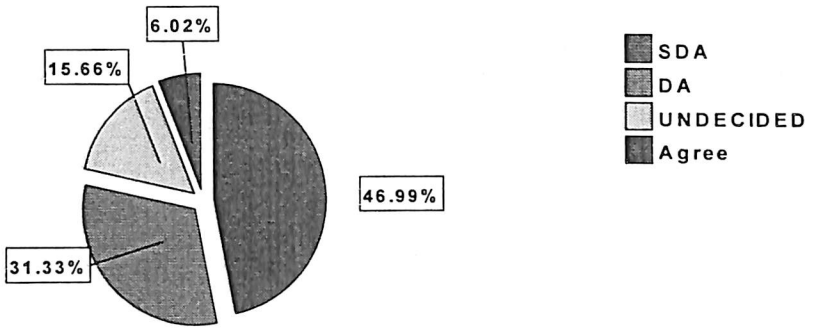


Fig. 4.8: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 8

On this point, respondents of the all four organizations feel that there are no excess staffs across all the four OIL PSU organizations. 78.33 percent of respondents either strongly disagree or disagree about the observation that staff is excess. Only a small percentage, namely, 6.02 percent of the respondents confirm that there are excess staffs.

In GUC & OMC2 not a single respondent feel that there is excess staff. While in GUC only one respondent remain undecided, in OMC2 a large no of respondents remain undecided on this question.

Question 9: There is shortage of staff

Table 4.9: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 9

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	21	39	8		68	16.39
DA	2	2	31	8	18	59	14.22
Undecided	3		32	24	9	65	15.66
Agree	4	43	16	24	36	119	28.67
Strongly agree	5	62		15	27	104	25.06
Total		128	118	79	90	415	100.00

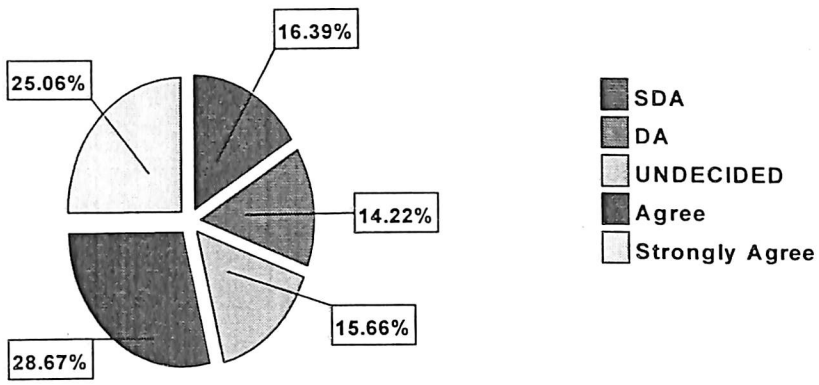


Fig. 4.9: Pie graph showing the responses of 415 employees of four OIL PSU organizations in accordance to question 9

A regards shortage of staff, the opinion is divided. 53.73 percent of the respondents endorse that there is shortage of staff in their organizations. At the same time a sizeable portion of respondents holds the view that there is no shortage of staff, they constitute around 30.61 percent. 15 % remained undecided on the question. Majority of GUC & OMC3 employees think that there is shortage of staff while majority of OMC1 & OMC2 think otherwise.

Question 10: Employees with right skills are available

Table 4.10: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 10

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2		8		9	17	4.10
Undecided	3	22	15	24	9	70	16.87
Agree	4	63	32	23	45	163	39.28
Strongly agree	5	43	63	32	27	165	39.76
Total		128	118	79	90	415	100.00

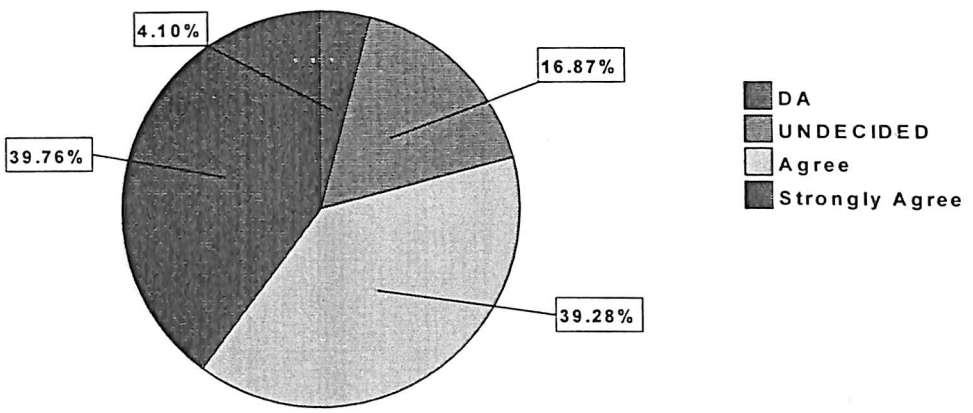


Fig. 4.10: Pie graph showing the responses of 415 employees of four OIL PSU organizations in accordance to question 10

"Yes, employees with right skills are available" endorses 79 percent of the respondents. This is true in all the four OIL PSU organizations. Only a small percentage of respondents consider that employees with right skills are not available in their organizations.

Question 11: Employees are deployed on right jobs

Table 4.11: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 11

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1		8		9	2.17
DA	2	20		7	9	36	8.67
Undecided	3	1	31	32	18	82	19.76
Agree	4	86	40	24	36	186	44.82
Strongly agree	5	20	47	8	27	102	24.58
Total		128	118	79	90	415	100.00

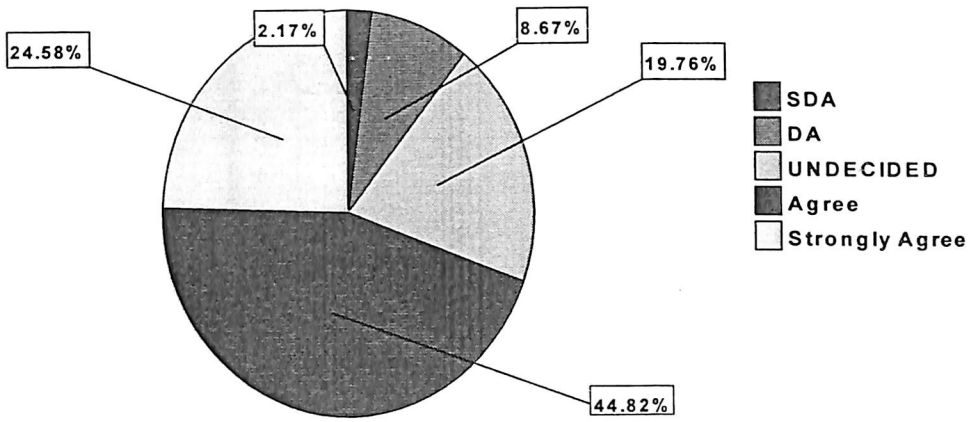


Fig. 4.11: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 11

As regards right persons on right job, there is an agreement that such deployment is prevalent in all these four OIL PSU organizations. Majority of respondents agree on this. Those who agree or strongly agree constitute about 69.4 percent of the respondents. Around 10.84 percent however think otherwise.

Question 12: Deployment of outsource employees is in practice / planning

Table 4.12: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 12

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1		20		18	38	9.16
DA	2		1		9	10	2.41
Undecided	3	25	63	55	18	161	38.80
Agree	4	62	25	8	18	113	27.23
Strongly agree	5	41	9	16	27	93	22.41
Total		128	118	79	90	415	100.00

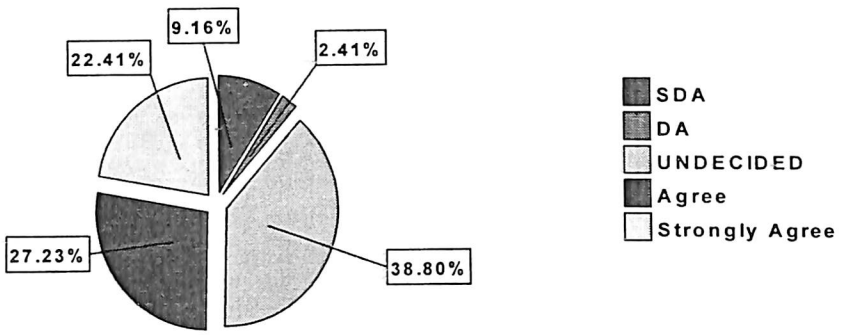


Fig. 4.12: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 12

A border line majority confirms that outsourcing is in practice. While 49.64 percent agree with this observation, 11.57 per cent of the respondents disagree with it. At the same time, 38.8 per cent of the respondents remain neutral. They are neither able to confirm nor deny. Absolute majority of people in GUC confirm that there is a practice / planning of deployment of outsourced employees in the organization which confirms/strengthen the response of GUC employees regarding shortage of staff.

Question 13: Outsourcing is a good practice

Table 4.13: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 13

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1	1	8		10	2.41
DA	2	20	29	8	18	75	18.07
Undecided	3	23	40	24	18	105	25.30
Agree	4	83	42	39	36	200	48.19
Strongly agree	5	1	6		18	25	6.02
Total		128	118	79	90	415	100.00

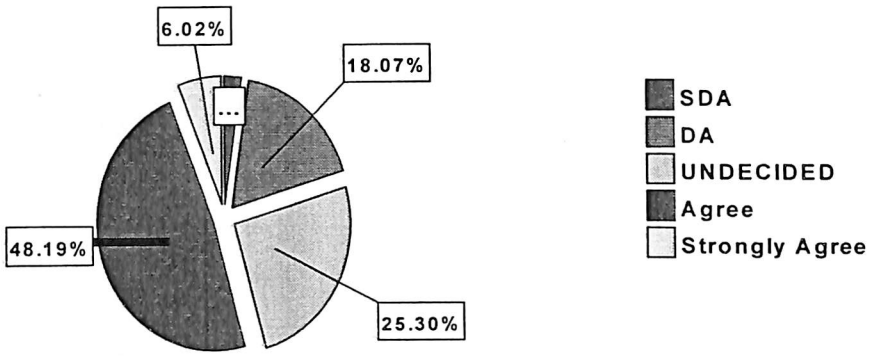


Fig. 4.13: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 13

About 54.21 percent of the respondents endorse that outsourcing is a good system. A strong group of these respondents as much as 25.3 percent is unable to convey any view. 20.48 per cent does not agree that outsourcing is a good system.

Question 14: Your workload is challenging but not burdensome

Table 4.14: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 14

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	20	1	7		28	6.75
DA	2					0	0.00
Undecided	3	3	23	24	9	59	14.22
Agree	4	87	64	40	27	218	52.53
Strongly agree	5	18	30	8	54	110	26.51
Total		128	118	79	90	415	100.00

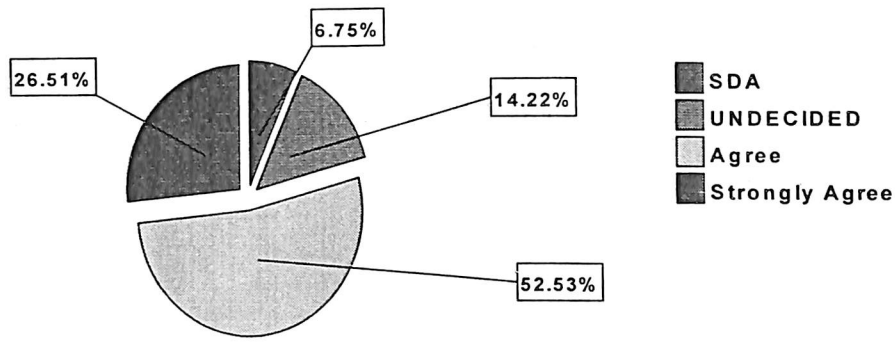


Fig. 4.14: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 14

From every organization, there is an overwhelming response suggesting that the work load in these organizations is challenging but not burdensome. Only around 6.75 per cent of the respondents think that this is an unacceptable description of the work load.

Question 15: Method of recruitment adopted is proper

Table 4.15: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 15

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	0	1			1	0.24
DA	2	0		7		7	1.69
Undecided	3	1	8	8	9	26	6.27
Agree	4	119	49	48	18	234	56.39
Strongly agree	5	8	60	16	63	147	35.42
Total		128	118	79	90	415	100.00

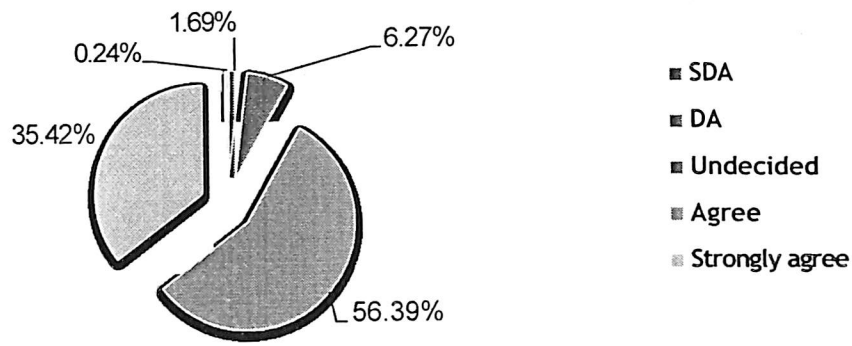


Fig. 4.15: Pie Chart showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 15

In regard to the method of requirement adopted in the respective of OIL PSU organizations, the respondents in an overwhelming majority, namely, 91.81 percent of them agree that requirement in their organization is proper. However, 6.27 percent is unable to decide whether the requirement method is proper or not. A little as 1.93 percent considers that the requirement method is not proper.

Question 16: External (open market) requirement is largely resorted to

Table 4.16: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 16

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	0	7		9	16	3.86
DA	2	2				2	0.48
Undecided	3	4	46	47	27	124	29.88
Agree	4	114	17	16	9	156	37.59
Strongly agree	5	8	48	16	45	117	28.19
Total		128	118	79	90	415	100.00

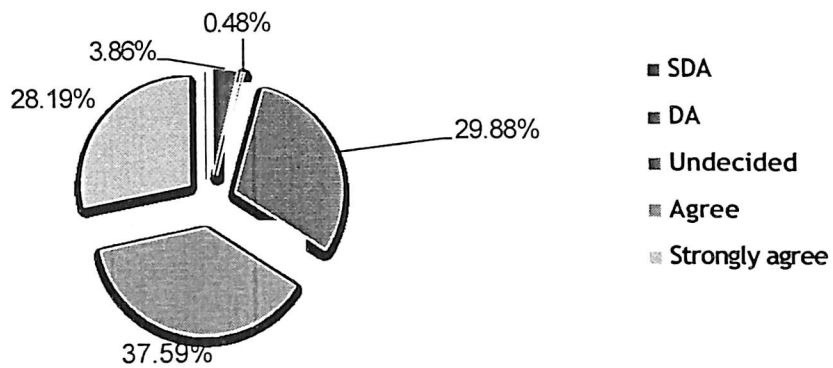


Fig. 4.16: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 16

Only about 65.78 percent of the respondents either agree or strongly agree that external recruitment is largely resorted to by their OIL PSU organizations. A sizeable portion of the respondents, that is, 29.88 percent is unable to confirm or deny. Only 4.34 percent consider that external source is not largely tapped.

Question 17: Internal recruitment (from within) is encouraged

Table 4.17: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 17

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	4		7	18	29	6.99
Undecided	3	2	45	24	18	89	21.45
Agree	4	100	25	32	18	175	42.17
Strongly agree	5	22	48	16	36	122	29.40
Total		128	118	79	90	415	100.00

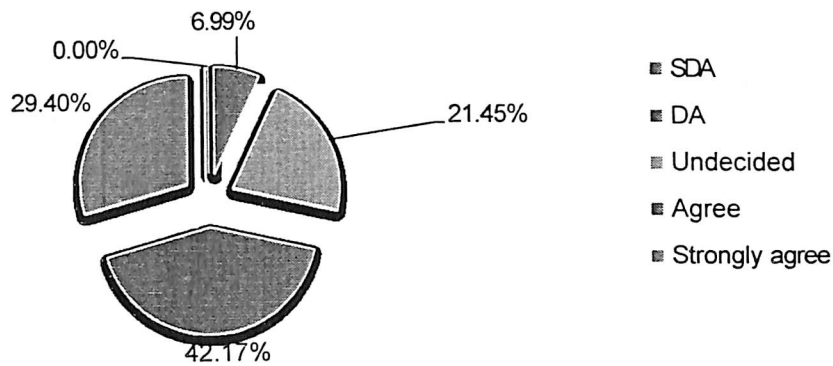


Fig. 4.17: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 17

In regard to internal requirement, 71.57 percent of respondents confirm that their OIL PSU organizations provide good opportunities for internal candidates. The respondents from GUC in particular have strongly endorsed this. While around 21.45 per cent remains undecided another 6.99 per cent does not feel that internal requirement is encouraged by their organizations.

Question 18: Job vacancies are advertised extensively

Table 4.18: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 18

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2					0	0.00
Undecided	3	11	13	8	18	50	12.05
Agree	4	30	16	8	18	72	17.35
Strongly agree	5	87	89	63	54	293	70.60
Total		128	118	79	90	415	100.00

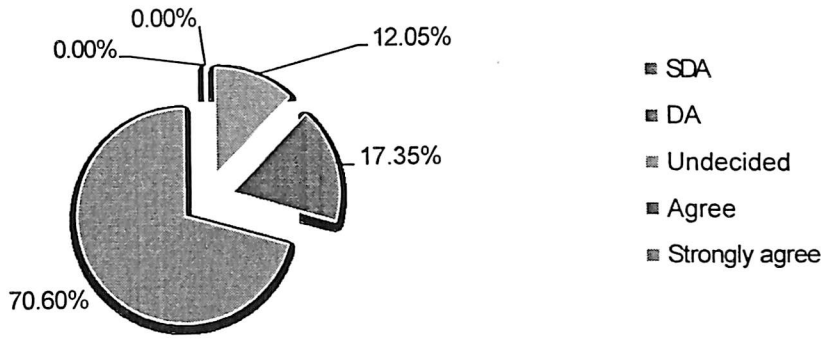


Fig. 4.18: Pie graph showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 18

The respondents overwhelmingly agree on this. 85.95 percent of them either agree or strongly agree about the fact that job vacancies are advertised extensively. However, still 12.05 percent of the respondents are there who feel that they are unable to take a decisive stand. Although not a single respondent of any organization consider that adequate publicity is not given for job vacancies.

Question 19: Fair opportunity is provided to all eligible candidates

Table 4.19: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 19

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1	7		9	17	4.10
DA	2					0	0.00
Undecided	3					0	0.00
Agree	4	84	30	23	18	155	37.35
Strongly agree	5	43	81	56	63	243	58.55
Total		128	118	79	90	415	100.00

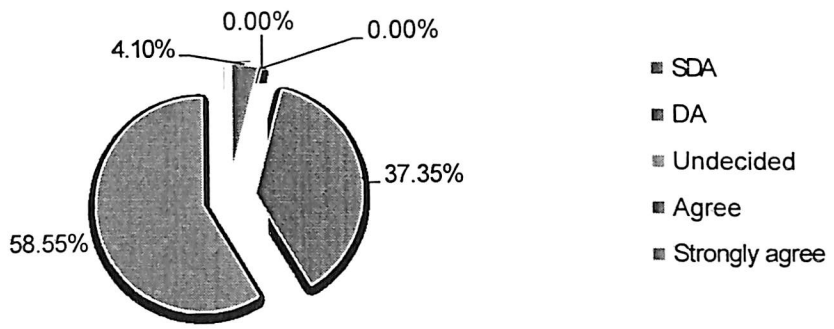


Fig. 4.19: Pie Chart showing the responses of 415 Respondents of four OIL PSU organizations in accordance to question 19

An overwhelming portion of the respondents confirm that fair opportunity is provided to all eligible candidates. They constitute 95.9 percent of the respondents. While only about 4.1 percent does not think that fair opportunity is given. Not a single respondent is unable to decide whether fair opportunity is provided or not.

Question 20: GATE Score is a Criterion for Selection

Table 4.20: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 20

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1			8		8	1.93
DA	2		8			8	1.93
Undecided	3	10	23	15	9	57	13.73
Agree	4	71	6	8	36	121	29.16
Strongly agree	5	47	81	48	45	221	53.25
Total		128	118	79	90	415	100.00

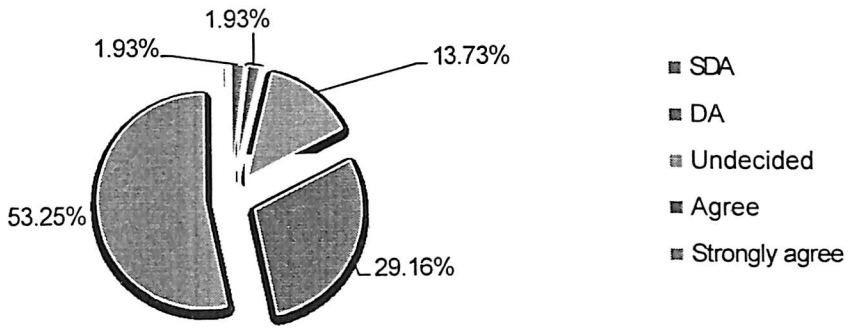


Fig. 4.20: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 20

A considerably large portion of the respondents confirms that proper weightage is given to GATE score at the time of recruitment. They are around 80 percent of the respondents. However, around 13.73 percent fails to decide whether proper weightage is given to GATE score. Only 3.86 percent of respondent express the negative views.

Question 21: Selection process (written test, interview, group discussion) is subjective

Table 4.21: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 21

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1	7		27	35	8.43
DA	2	5		7		12	2.89
Undecided	3	12	15	8	9	44	10.60
Agree	4	95	38	24	18	175	42.17
Strongly agree	5	15	58	40	36	149	35.90
Total		128	118	79	90	415	100.00

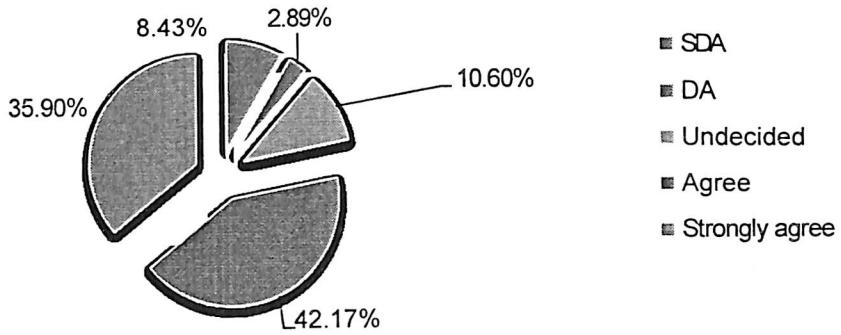


Fig. 4.21: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 21

There is fair amount of objectivity in the selection process. This is evident from the response. This is confirmed by 78.07 percent of the respondents. Hardly around 11.32 percent does not see objectivity and another group of 10.6 percent is unable to express any view.

Question 22: Induction training programme is in vogue

Table 4.22: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 22

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	3	40	24	9	76	18.31
DA	2	5	7	7	9	28	6.75
Undecided	3		8	16		24	5.78
Agree	4	78	30		27	135	32.53
Strongly agree	5	42	33	32	45	152	36.63
Total		128	118	79	90	415	100.00

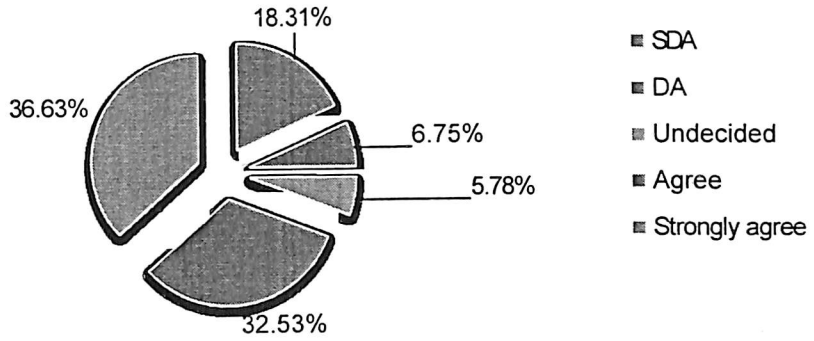


Fig. 4.22: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 22

In regard to induction training programme, being implemented in the Oil PSU organizations, a substantial portion of the respondents, namely 61.16 percent agree that such practice is in vogue. However respondents from GUC and OMC3 strongly endorse this position. Still around 22.06% expresses opposite view and around 5.78 percent, however, remains neutral.

Question 23: Your job makes the best use of your abilities

Table 4.23: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 23

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	1	7		9	17	4.10
Undecided	3	3	14	16	9	42	10.12
Agree	4	103	47	47	36	233	56.14
Strongly agree	5	21	50	16	36	123	29.64
Total		128	118	79	90	415	100.00

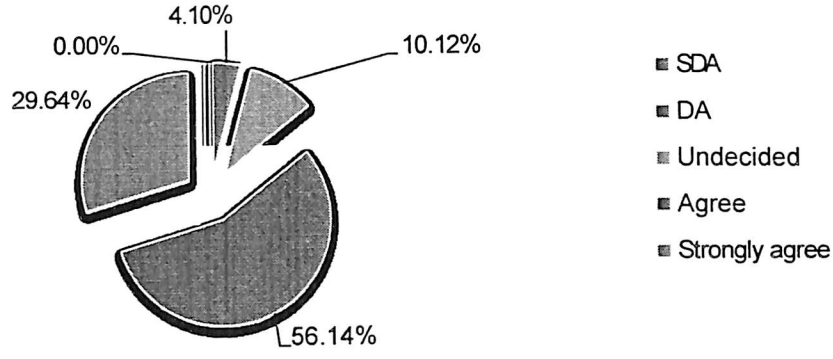


Fig. 4.23: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 23

Here again, a significant percentage of respondents, that is, 85.78 percent believe that their jobs make the best use of their abilities. However, only 4.1 percent does not share this view while 10.12% remain undeceive.

Question 24: The targets are set fairly

Table 4.24: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 24

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1		8		9	2.17
DA	2	7		7	9	23	5.54
Undecided	3	10	21	8	18	57	13.73
Agree	4	63	63	40	36	202	48.67
Strongly agree	5	47	34	16	27	124	29.88
Total		128	118	79	90	415	100.00

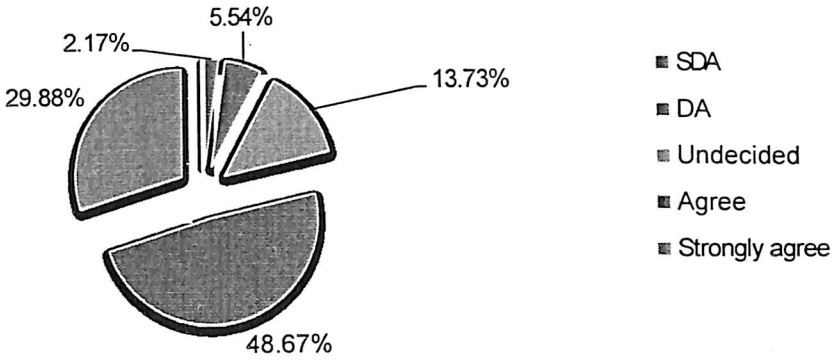


Fig. 4.24: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 24

78.55 percent of the respondents either agrees or strongly agrees that the targets are set fairly. While around 13.73 percent is unable to confirm any view, around 7.74 percent does not however feel that targets are set fairly.

Question 25: Job rotation is followed

Table 4.25: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 25

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1		8		9	2.17
DA	2	8	15	16	9	48	11.57
Undecided	3	8	44	15	27	94	22.65
Agree	4	76	26	24	36	162	39.04
Strongly agree	5	35	33	16	18	102	24.58
Total		128	118	79	90	415	100.00

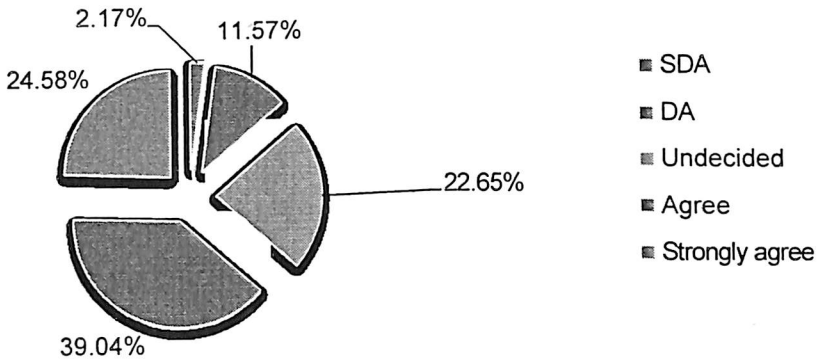


Fig. 4.25: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 25

As regards job rotation, 63.62 percent of the respondents states that job rotation is being followed. While 22.65 percent remains undecided 13.74 percent has indicated that job rotation is not being followed.

Question 26: Robust annual appraisal system exists in organization.

Table 4.26: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 26

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	3	7	7	9	26	6.27
DA	2	4	6		9	19	4.58
Undecided	3	8	22	24	18	72	17.35
Agree	4	80	66	40	27	213	51.33
Strongly agree	5	33	17	8	27	85	20.48
Total		128	118	79	90	415	100.00

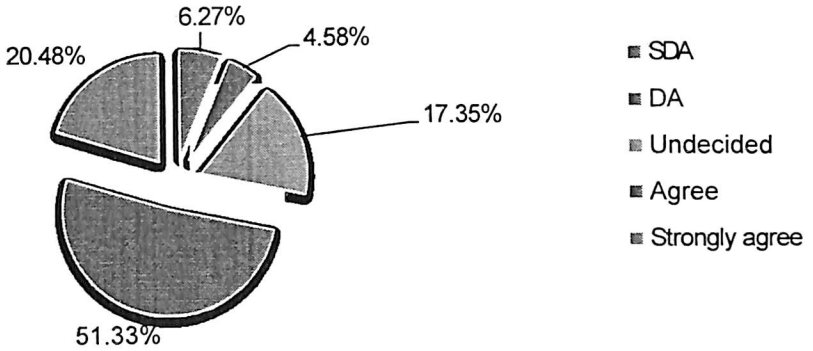


Fig. 4.26: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 26

As regards to appraisal system, 71.81 percent has indicated that there is a good appraisal system exists in the OIL PSU organizations. 10.85 percent does not agree with this. Another 17.35 per cent is unable to take a stand on either side.

Question 27: Promotion opportunity available is fair

Table 4.27: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 27

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	7	7		18	32	7.71
Undecided	3	14	22	31	9	76	18.31
Agree	4	97	49	32	54	232	55.90
Strongly agree	5	10	40	16	9	75	18.07
Total		128	118	79	90	415	100.00

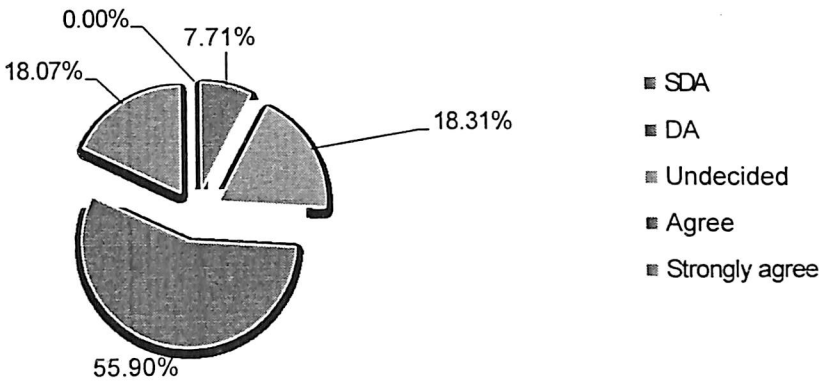


Fig. 4.27: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 27

Around 73.16 percent of the respondents have stated that promotion opportunity available in their organizations is fair. These appear to be near uniformity over this. Only 7.71 percent however is of the view that fair opportunity is not provided in the matter of promotion. 18.31 per cent has not expressed any view.

Question 28: Career Planning & Growth scheme is favourable to employees

Table 4.28: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 28

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	7	8	7	9	31	7.47
Undecided	3	11	19	16	36	82	19.76
Agree	4	97	50	48	36	231	55.66
Strongly agree	5	13	41	8	9	71	17.11
Total		128	118	79	90	415	100.00

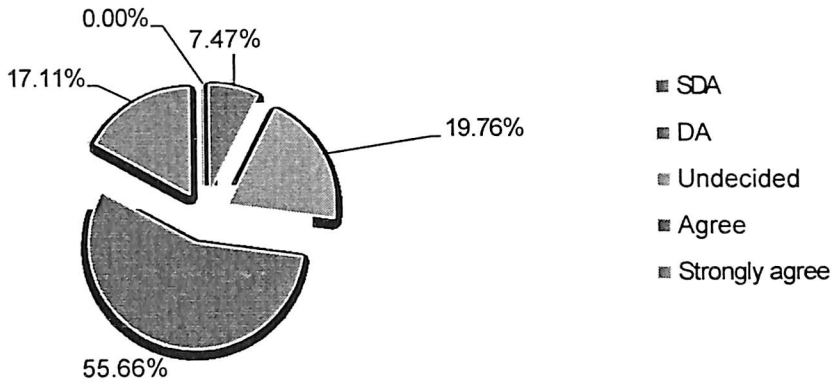


Fig. 4.28: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 28

As regards Career Planning & Growth scheme, over 72.77 percent considers it to be favourable to employees. Only 19.76 percent does not think so. Over 19 percent remains neutral.

Question 29: Career Planning & Growth is based on seniority and hence effective

Table 4.29: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 29

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	8	7	7	18	40	9.64
DA	2	14	16	16	18	64	15.42
Undecided	3	15	32	32	27	106	25.54
Agree	4	75	38	16	18	147	35.42
Strongly agree	5	16	25	8	9	58	13.98
Total		128	118	79	90	415	100.00

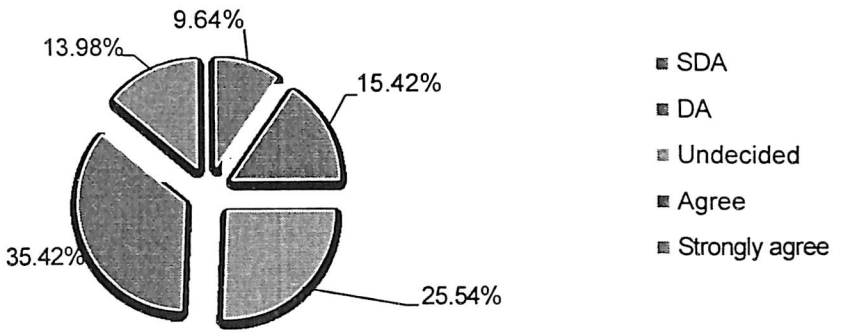


Fig. 4.29: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 29

Here is clear division on seniority based promotion. Only 49.4 percent believes that Career Planning & Growth based on seniority is effective. However, around 25.06 percent of the respondents have expressed themselves against this view. Surprisingly 25.54 percent does not have any specific view.

Question 30: Career Planning & Growth is based on seniority up to middle level and by merit for higher levels and hence effective

Table 4.30: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 30

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	5	1		9	15	3.61
DA	2	6	8	7	9	30	7.23
Undecided	3	2	30	24	9	65	15.66
Agree	4	97	39	40	27	203	48.92
Strongly agree	5	18	40	8	36	102	24.58
Total		128	118	79	90	415	100.00

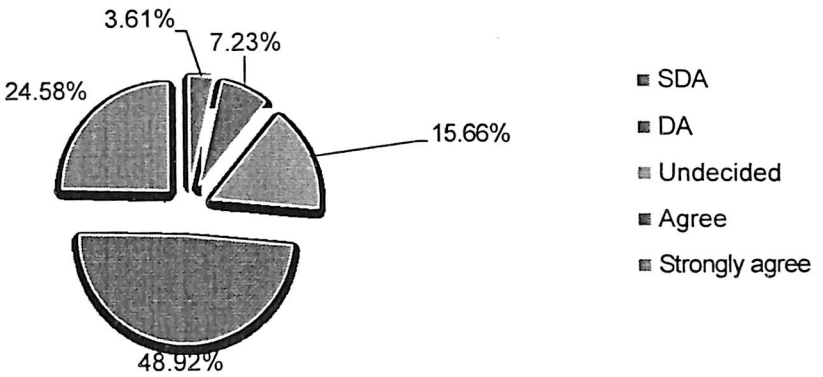


Fig. 4.30: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 30

"Career Planning & Growth based on seniority up to middle level and on merit for higher level is effective" find favour with a majority of respondents. 72.87 per cent of the respondents accredited to this. Another 15.66 percent remains undecided. Hardly around 10.84 percent disagree with this view.

Question 31: 360 degree feedback system is being followed

Table 4.31: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 31

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	4		16		20	4.82
DA	2	0				0	0.00
Undecided	3	12		8		20	4.82
Agree	4	40	48	23	45	156	37.59
Strongly agree	5	72	70	32	45	219	52.77
Total		128	118	79	90	415	100.00

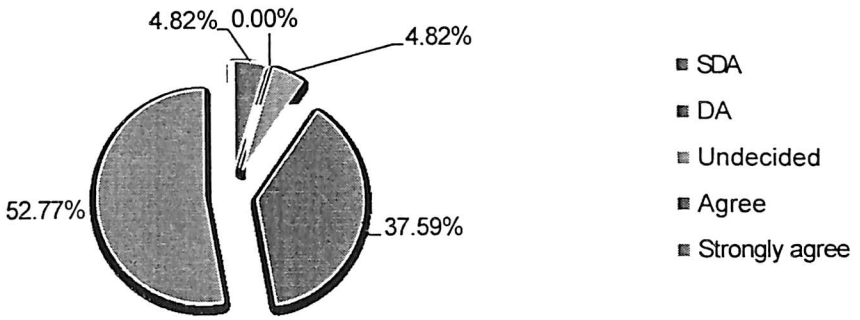


Fig. 4.31: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 31

This element also finds huge favour with the respondents. 90.36 percent 360 degree feedback is prevalent in Oil PSU organizations. However, merely 4.82 percent think opposite and 4.82% respondents remain neutral.

Question 32: There is recognition for exceptional performance

Table 4.32: Table showing the responses of 415 respondents of four OIL PSU organizations in accordance to question 32

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1		8		9	2.17
DA	2	15		16		31	7.47
Undecided	3	17	16	16		49	11.81
Agree	4	42	84	39	63	228	54.94
Strongly agree	5	53	18		27	98	23.61
Total		128	118	79	90	415	100.00

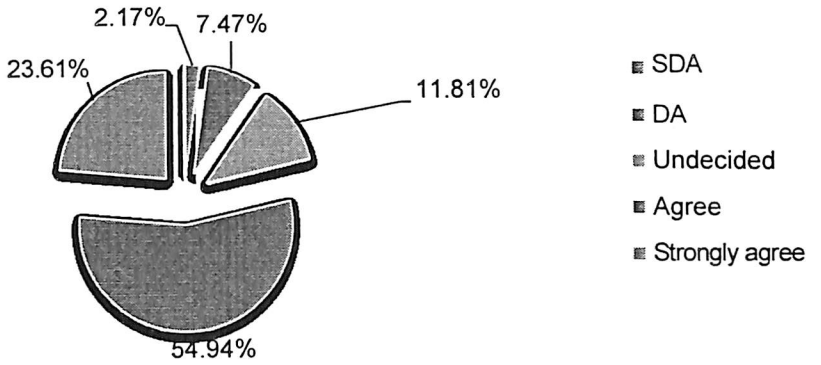


Fig. 4.32: Pie Chart showing the responses of 415 Respondents of four OIL PSU organizations in accordance to question 32

In regards to recognition for exceptional performance, about 83.55 percent believes that there is recognition from the organization for exceptional performance. However only 9.64 percent thinks that such recognition is not forthcoming. 11.81 percent remains undecided.

Question 33: People lacking competence in doing their jobs are helped to acquire competence rather than being left unattended

Table 4.33: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 33

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	15	7		9	31	7.47
Undecided	3	17	22	24	9	72	17.35
Agree	4	70	50	39	45	204	49.16
Strongly agree	5	26	39	16	27	108	26.02
Total		128	118	79	90	415	100.00

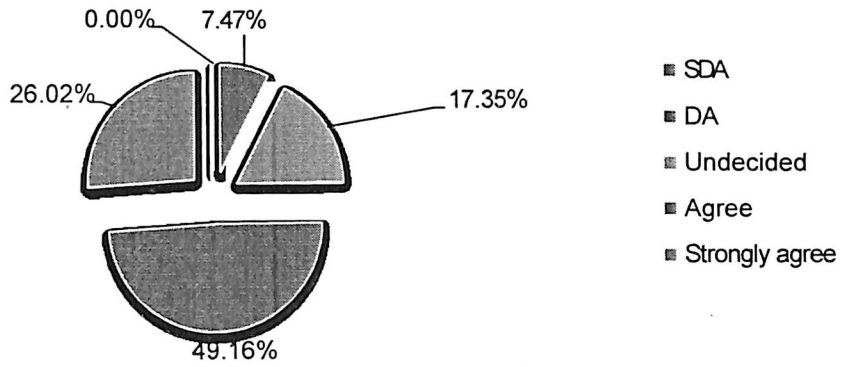


Fig. 4.33: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 33

That the OIL PSU organizations give high priority for skill development through training programme is substantiated by the highly significant favourable response by employee. 75.18 percent of the respondents confirm this. Hardly less than 8 percent disagrees. Again 17.35 percent remains undecided.

Question 34: Employees Engagement Surveys are being done in the Organization

Table 4.34: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 34

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	12	7	8	9	36	8.67
DA	2					0	0.00
Undecided	3	14	22	16	18	70	16.87
Agree	4	73	57	31	9	170	40.96
Strongly agree	5	29	32	24	54	139	33.49
Total		128	118	79	90	415	100.00

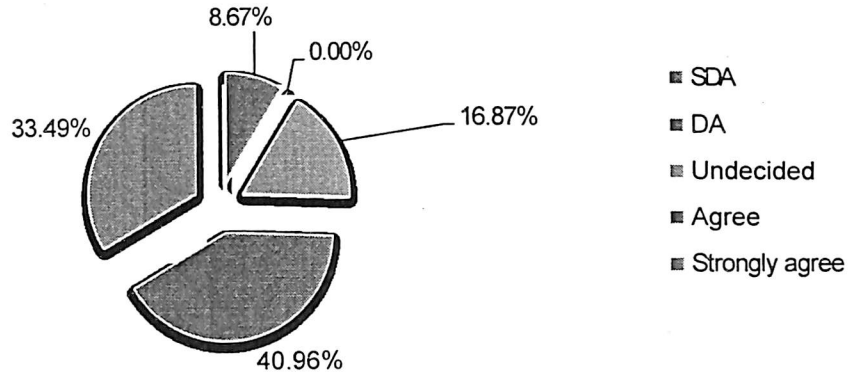


Fig. 4.34: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 34

This feature of employee engagement is strongly supported by the respondents. 74.45 percent has endorsed this. Only a few as 8.67% have stated that employee engagement surveys are not being done while 16.87% remain undecided on the matter.

Question 35: Employees are motivated

Table 4.35: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 35

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	1	7		9	17	4.10
DA	2					0	0.00
Undecided	3	1	25	16		42	10.12
Agree	4	107	62	55	63	287	69.16
Strongly agree	5	19	24	8	18	69	16.63
Total		128	118	79	90	415	100.00

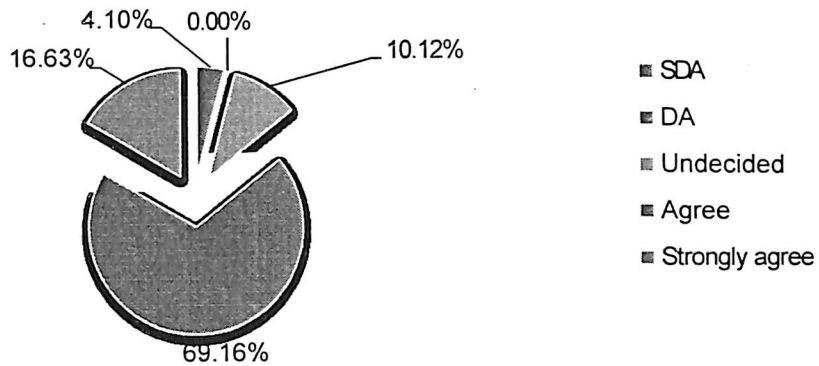


Fig. 4.35: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 35

A majority of employees regards that they are motivated. To this category belong 85.79 percent of respondents. While 10.12 percent is unable to furnish any view, only 4.1 percent does not seem to be motivated.

Question 36: Sense of belongingness is visible

Table 4.36: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 36

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	1	6		9	16	3.86
Undecided	3	14	23	24	9	70	16.87
Agree	4	65	71	39	18	193	46.51
Strongly agree	5	48	18	16	54	136	32.77
Total		128	118	79	90	415	100.00

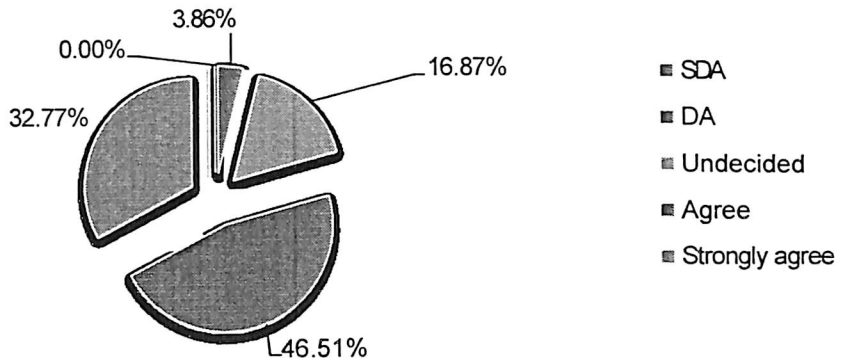


Fig. 4.36: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 36

This aspect should be visible among all employees. Yes, 79.28% confirm that there is a high visibility of belongingness to their respective OIL PSU organizations. Only 3.86 percent has differed. Of course, 16.87 per cent seems to be taking a neutral position.

Question 37: The organization is a good place to work

Table 4.37: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 37

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2					0	0.00
Undecided	3	12	21	7	27	67	16.14
Agree	4	103	57	48	9	217	52.29
Strongly agree	5	13	40	24	54	131	31.57
Total		128	118	79	90	415	100.00

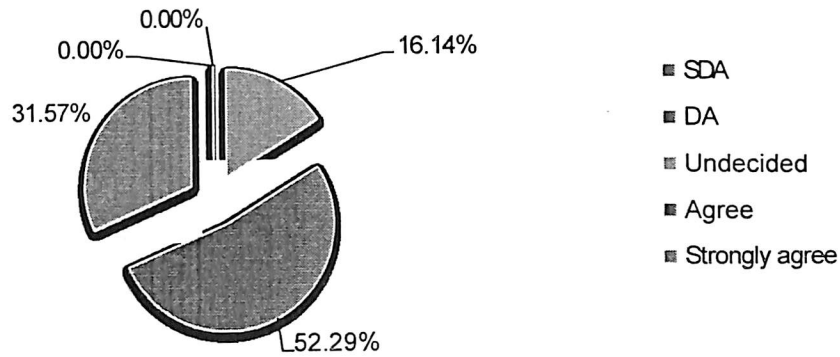


Fig. 4.37: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 37

The sense of belonging to the organization is very high with 83.86 percent making a statement that their organization is good place to work. 16.14 percent remains undecided. No one has expressed disagreement.

Question 38: The grievances are handled fairly

Table 4.38: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 38

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	2	13		27	42	10.12
Undecided	3	21	32	31		84	20.24
Agree	4	71	47	32	36	186	44.82
Strongly agree	5	34	26	16	27	103	24.82
Total		128	118	79	90	415	100.00

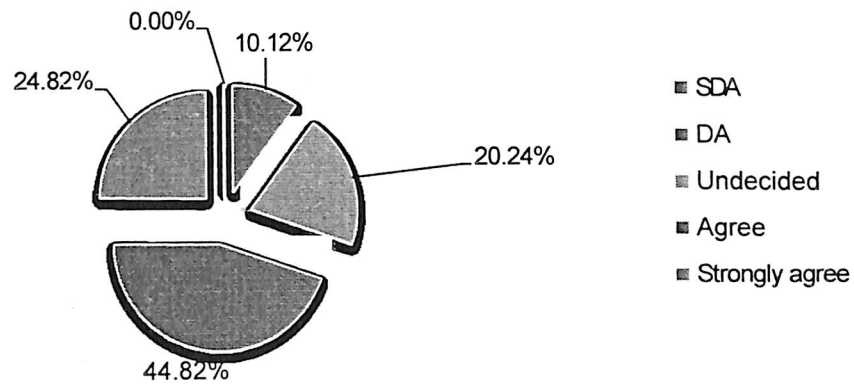


Fig. 4.38: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 38

In regards to grievances, the employees to whom this question is addressed have responded that there is fairness in redressing the grievances. 69.64 percent thinks so. While a considerable portion of the respondents namely 20.24 percent is unable to take specific side, around 10.12 percent thinks that grievances are not handled properly.

Question 39: Employees are satisfied with the appraisal system being followed in the organization.

Table 4.39: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 39

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	4	29	15	18	66	15.90
Undecided	3	3	55	24	27	109	26.27
Agree	4	93	18	32	36	179	43.13
Strongly agree	5	28	16	8	9	61	14.70
Total		128	118	79	90	415	100.00

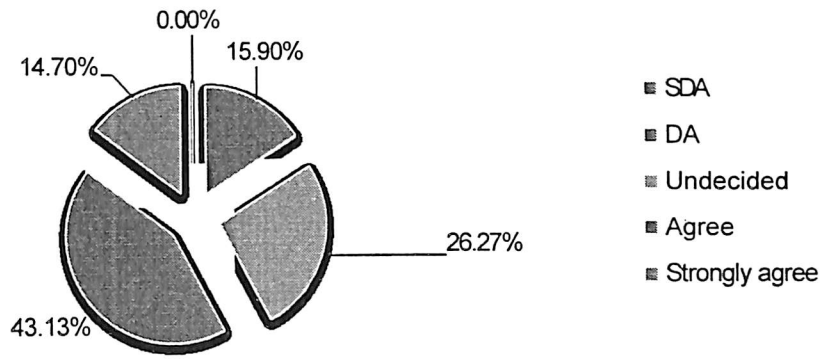


Fig. 4.39: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 39

Regarding satisfactory appraisal system, about 57.2 percent believes that they are satisfied with the appraisal system being followed in the organization. A considerable portion, namely, 15.9 per cent thinks that such appraisal system is not forthcoming. 26.27 per cent remains undecided. Particularly the personnel from GUC have confirmed that their organization recognizes their performance. As many as 121 out of 128 employees have chosen agree or strongly agree as the rating.

Question 40: Oil & Gas sector is undergoing structural change. Separate entities are formed by "Unbundling the Business Sectors". New "Methods and Performance Measures" are being taken.

Table 4.40: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 40

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	4		7	9	20	4.82
Undecided	3	7	39	32	18	96	23.13
Agree	4	66	46	24	18	154	37.11
Strongly agree	5	51	33	16	45	145	34.94
Total		128	118	79	90	415	100.00

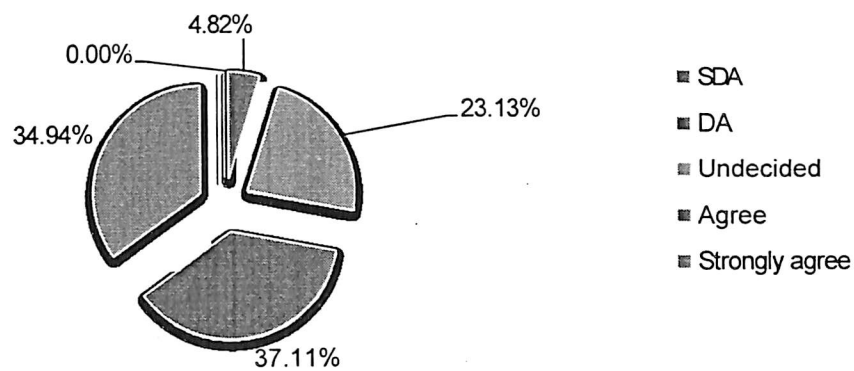


Fig. 4.40: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 40

Around 72.05 percent of the employees believe that they are prepared to cope with the emerging change in the oil sector. Only 4.82 percent differs while 23.13 percent does not have any specific view.

Question 41: There is good "training policy" in the organization for Non-executives / Staff

Table 4.41: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 41

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	3	21	8	27	59	14.22
Undecided	3	9	17	23		49	11.81
Agree	4	68	38	32	18	156	37.59
Strongly agree	5	48	42	16	45	151	36.39
Total		128	118	79	90	415	100.00

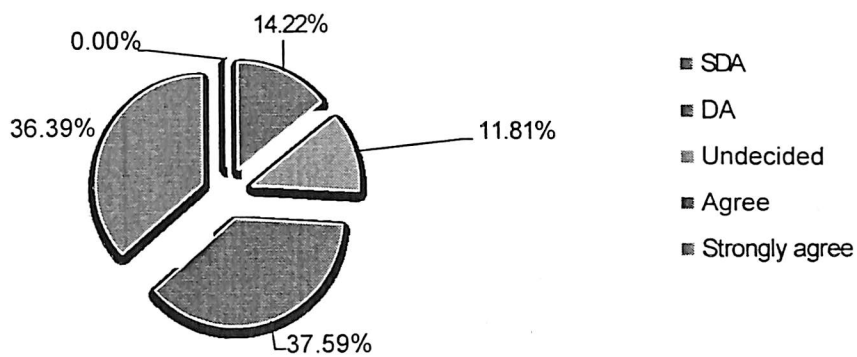


Fig. 4.41: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 41

As regards training policy, 73.98 percent has indicated that there is a good training policy in OIL PSU for non-executives / staff. Specifically respondents from GUC endorsed the same strongly as 116 out of 128 have supported the statement. Overall 14.22 percent does not agree with this. Another 11.81 percent is unable to take a stand on either side.

Question 42: There is well equipped dedicated training institute for imparting training to Non-executives / Staff

Table 4.42: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 42

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	5	14		18	37	8.92
Undecided	3	7	7	7	9	30	7.23
Agree	4	15	79	32	18	144	34.70
Strongly agree	5	101	18	40	45	204	49.16
Total		128	118	79	90	415	100.00

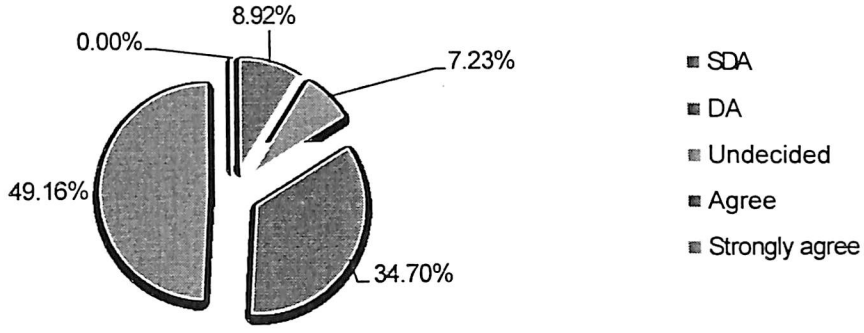


Fig. 4.42: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 42

As a view, this is strongly supported. Over 83.86 percent endorses it. A small group of over 8 percent of the respondents does not find it useful. In the undecided category, another 7.23 percent of the respondents have remained.

Question 43: Training needs are assessed systematically for Non-executives/Staff

Table 4.43: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 43

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	5	21	8	27	61	14.70
Undecided	3	2		15	9	26	6.27
Agree	4	42	70	40	18	170	40.96
Strongly agree	5	79	27	16	36	158	38.07
Total		128	118	79	90	415	100.00

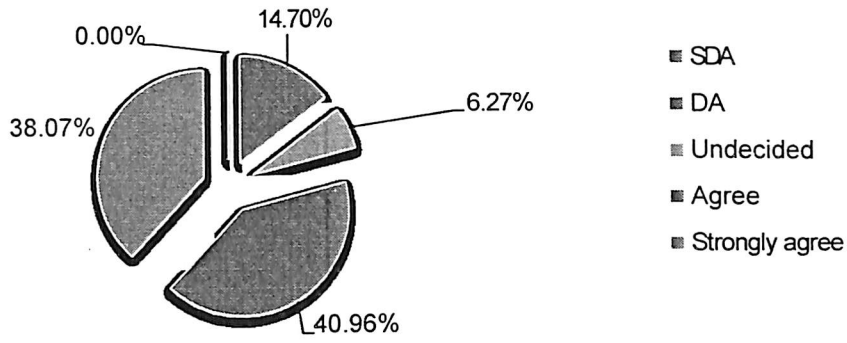


Fig. 4.43: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 43

In so far as systematic assessment of training needs is concerned, about 79.03 percent confirms that it is being done so. Quite a few, that is, as much as 6.27 percent of the respondents are unable to take any position. A considerable portion, that is, 14.7 percent does not think that there is a systematic assessment of training needs.

Question 44: Induction training programme is in Practice for Non-executives / Staff

Table 4.44: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 44

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	5				5	1.20
DA	2	5		8	18	31	7.47
Undecided	3	4	15	8	18	45	10.84
Agree.	4	44	64	39	18	165	39.76
Strongly agree	5	70	39	24	36	169	40.72
Total		128	118	79	90	415	100.00

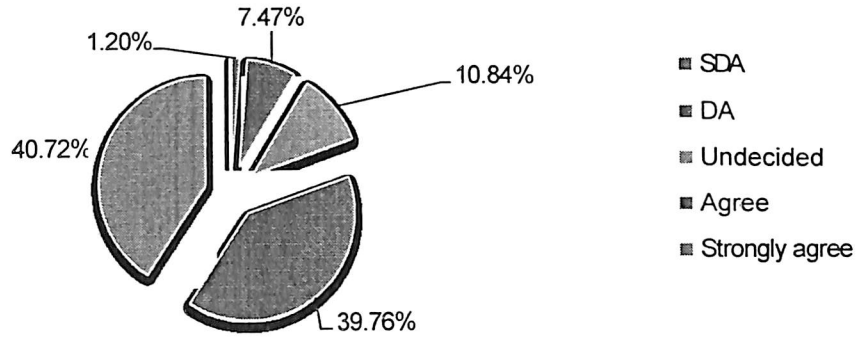


Fig. 4.44: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 44

In regard to induction training programme to non-executives / staff, being implemented in the Oil PSU organizations, a substantial portion of the respondents, namely 80.48 percent agree that such practice is in vogue. 8.67 % are against the view while 10.84 percent remains neutral.

Question 45: Department head are consulted on training needs for Non-executives / Staff

Table 4.45: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 45

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	3	16			19	4.58
Undecided	3	2	15	8	9	34	8.19
Agree	4	69	48	39	36	192	46.27
Strongly agree	5	54	39	32	45	170	40.96
Total		128	118	79	90	415	100.00

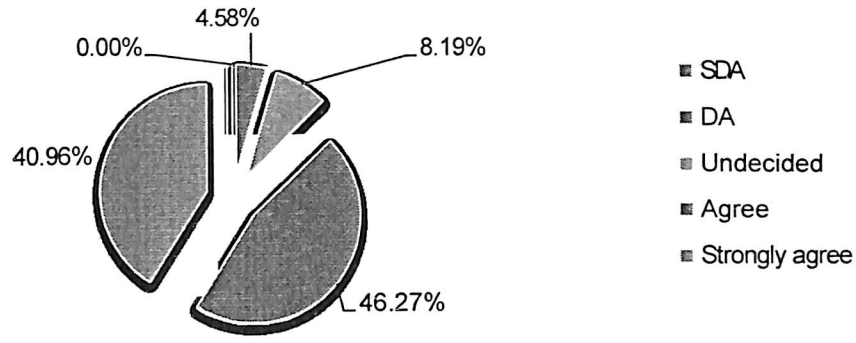


Fig. 4.45: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 45

A majority of the respondents states that department heads are being consulted on training needs. Endorsement is by 87.23 percent of the respondents. However, 8.19 percent remains neutral and only 4.58 percent of the respondents think that department heads are not consulted on training needs.

Question 46: New technology requirements are considered during TNA for Non-executives / Staff

Table 4.46: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 46

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	6	14		18	38	9.16
Undecided	3	3	15	16	9	43	10.36
Agree	4	65	55	39	18	177	42.65
Strongly agree	5	54	34	24	45	157	37.83
Total		128	118	79	90	415	100.00

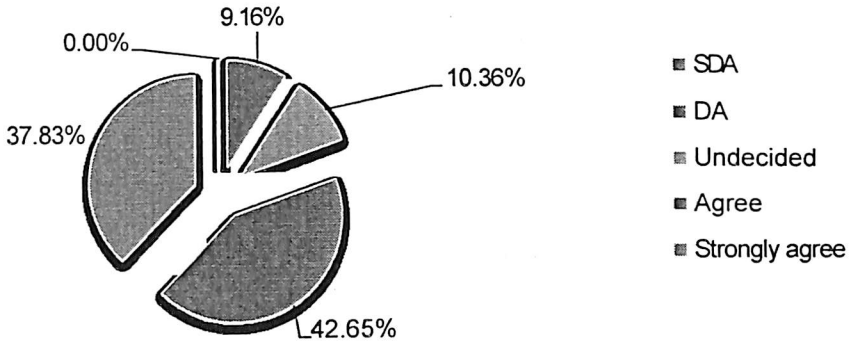


Fig. 4.46: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 46

A significantly large proportion of the respondents 80.48% have confirmed that new technology requirements are taken into account while formulating training schemes. Very few about 9.16 have disagreed. A small proportion of 10.36% remains undecided here too.

Question 47: NE / Staff's views on training requirements are considered

Table 4.47: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 47

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	2	21		18	41	9.88
Undecided	3	16		24		40	9.64
Agree	4	68	71	39	27	205	49.40
Strongly agree	5	42	26	16	45	129	31.08
Total		128	118	79	90	415	100.00

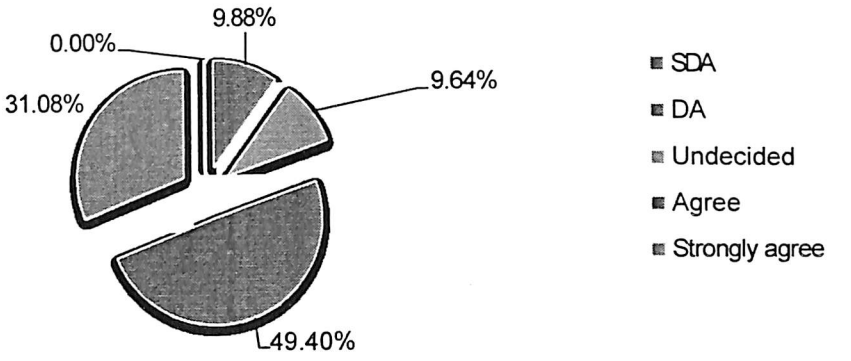


Fig. 4.47: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 47

To find out whether employees' proposal or suggestion is taken into account while training scheme is firmed up, this question was administered. A large proportion of 80.48 percent confirms that employee's views on training requirements are heard. A small proportion, say, 9.88 percent feels that no consideration to employees' proposal is given. 9.64 percent remains undecided. A further look into the responses reveals that more employees from GUC have confirmed that their proposals on training requirements are given due consideration.

Question 48: In-house training is regular feature for Non-executives / Staff

Table 4.48: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 48

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	7				7	1.69
Undecided	3	2	7	8	9	26	6.27
Agree	4	28	55	31	18	132	31.81
Strongly agree	5	91	56	40	63	250	60.24
Total		128	118	79	90	415	100.00

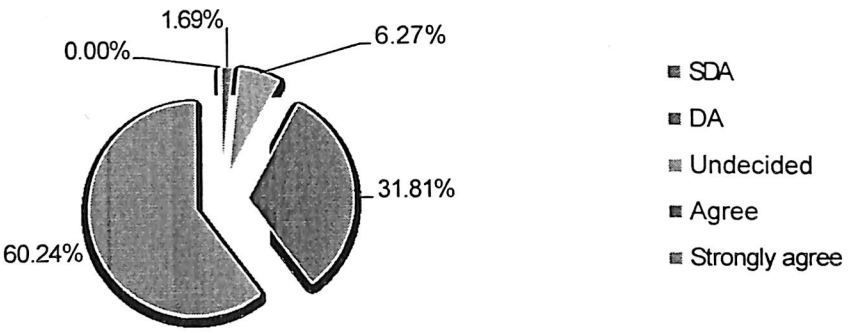


Fig. 4.48: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 48

This element also finds huge favour with the respondents. 92.05 percent states that in-house training is a regular feature. However, mere 1.69 percent does not think that in-house training is being conducted regularly and almost proportion of 6.27% remains neutral.

Question 49: Annual training calendar is prepared and notified in advance for Non-executives / Staff

Table 4.49: Table showing the responses of 415 Respondents of four OIL PSU organizations in accordance to question 49

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	1	7		9	17	4.10
Undecided	3	12	30	16	9	67	16.14
Agree	4	26	25	7	18	76	18.31
Strongly agree	5	89	56	56	54	255	61.45
Total		128	118	79	90	415	100.00

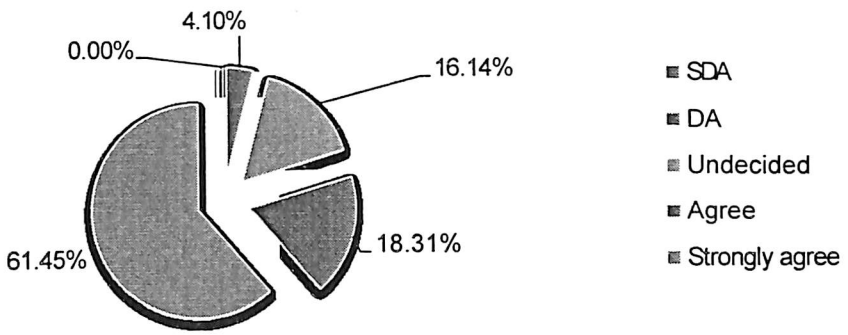


Fig. 4.49: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 49

A huge 79.76 percent points out that annual training calendar is prepared and notified in advance. Across the OIL PSU organizations, this view is endorsed firmly by the respondents. Only 4.1 percent states that this not happening while other 16.14% remained neutral.

Question 50: Training covers skill & Knowledge development for Non executives / Staff

Table 4.50: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 50

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	1	7		18	26	6.27
Undecided	3	1	8	8		17	4.10
Agree	4	81	63	39	18	201	48.43
Strongly agree	5	45	40	32	54	171	41.20
Total		128	118	79	90	415	100.00

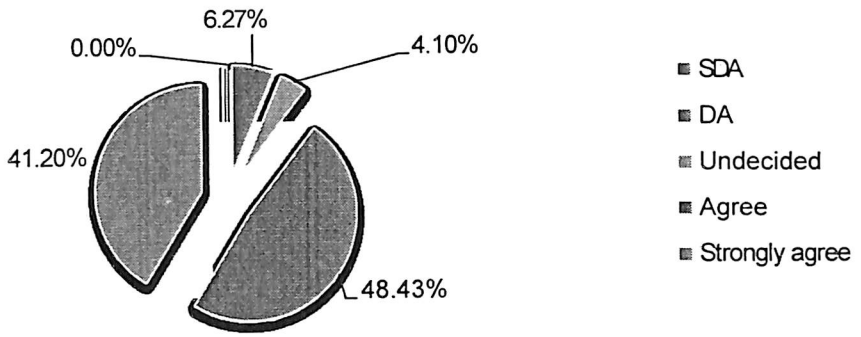


Fig. 4.50: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 50

This element also finds huge favour with the respondents. 89.63 percent states that trainings cover skill & Knowledge development for Non executives / Staff. However, 6.27 percent does not think so and even lesser respondents of 4.1% remains neutral.

Question 51: Behavioural Trainings are being imparted for attitudinal change of Non-executives / Staff

Table 4.51: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 51

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	7	8	8		23	5.54
Undecided	3	10	21	8	27	66	15.90
Agree	4	55	38	16	18	127	30.60
Strongly agree	5	56	51	47	45	199	47.95
Total		128	118	79	90	415	100.00

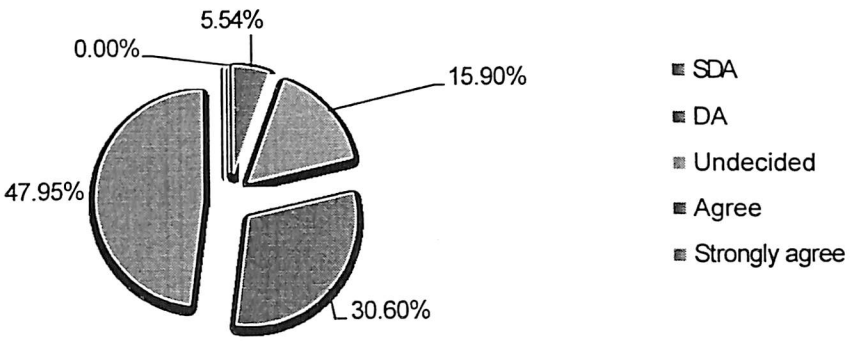


Fig. 4.51: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 51

The fact of a very substantial portion of respondents confirming that training programmes cover attitudinal change is quite healthy. This is what prepares the employees to face the challenges before an organization. 78.55 percent of the respondents have expressed themselves strongly on this aspect. Around 15.9 percent has remained undecided and only 5.54% are unable to agree.

Question 52: There is adequate participation in In-house training programme for Non-executives / Staff

Table 4.52: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 52

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2					0	0.00
Undecided	3	6	21	8	18	53	12.77
Agree	4	73	71	47	27	218	52.53
Strongly agree	5	49	26	24	45	144	34.70
Total		128	118	79	90	415	100.00

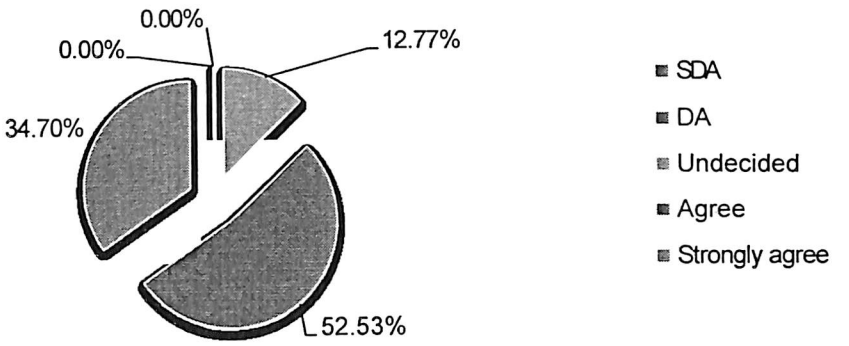


Fig. 4.52: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 52

As far as adequacy in participation in in-house training programmes, a huge majority has confirmed that the participation is adequate. Over 87.23 percent belongs to this category and not a single respondent believe that the participation is not adequate. Only 12.77 per cent remains undecided.

Question 53: In-house training programmes are useful for Non-executives/Staff

Table 4.53: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 53

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2				9	9	2.17
Undecided	3	19	7	16	9	51	12.29
Agree	4	55	62	39	18	174	41.93
Strongly agree	5	54	49	24	54	181	43.61
Total		128	118	79	90	415	100.00

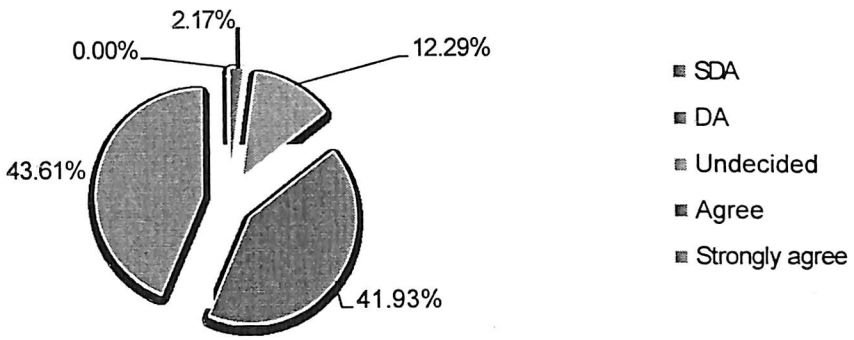


Fig. 4.53: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 53

The predominant view here is training programmes are useful. 85.54 percent of the respondents have stated so. Only 2.17 percent has stated that the programmes are not useful and 12.29 % unable to furnish any views.

Question 54: Non-executives / Staff s are sent for external training

Table 4.54: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 54

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1		6	8	9	23	5.54
DA	2	6	23	15	18	62	14.94
Undecided	3	6	6	16	9	37	8.92
Agree	4	43	49	24	9	125	30.12
Strongly agree	5	73	34	16	45	168	40.48
Total		128	118	79	90	415	100.00

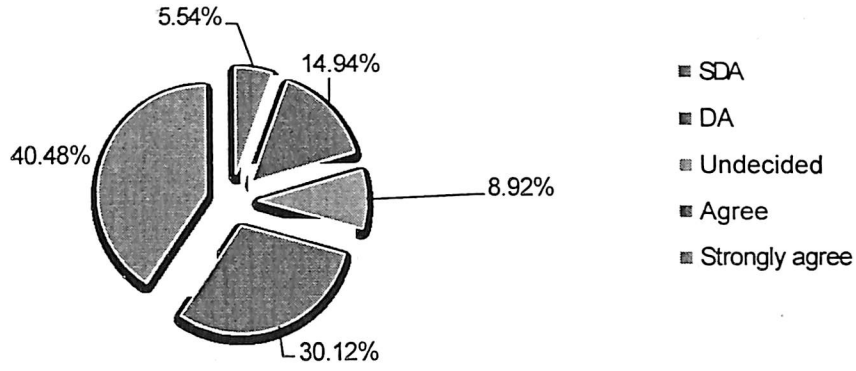


Fig. 4.54: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 54

The response is not as enthusiastic as it is for in-house training. But still over 70.6 percent has indicated that employees are sent for external training. Around 20.48 percent feels that employees are not being sent for external training. Only, 8.92 percent has remained undecided.

Question 55: External training programmes are relevant and useful for Non-executives / Staff

Table 4.55: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 55

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1					0	0.00
DA	2	4	6		18	28	6.75
Undecided	3	4	14	23	9	50	12.05
Agree	4	70	47	32	36	185	44.58
Strongly agree	5	50	51	24	27	152	36.63
Total		128	118	79	90	415	100.00

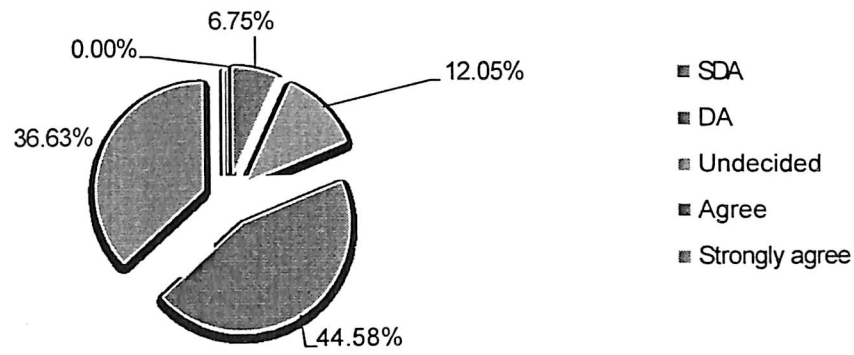


Fig. 4.55: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 55

Although much does not feel that employees are sent for external training programmes, as regards relevancy and usefulness of external programmes, there is an overwhelming view in favour of external programmes. Over 81.21 percent is in favour of external training programme. A very small portion of 6.75 percent does not consider external training programmes as useful and relevant. Another 12.05 percent has expressed no views.

Question 56: Impact of training on performance is assessed for Non executives / Staff

Table 4.56: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 56

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	9		8	9	26	6.27
DA	2	11		8		19	4.58
Undecided	3	12	44	39	63	158	38.07
Agree	4	84	33	16	9	142	34.22
Strongly agree	5	12	41	8	9	70	16.87
Total		128	118	79	90	415	100.00

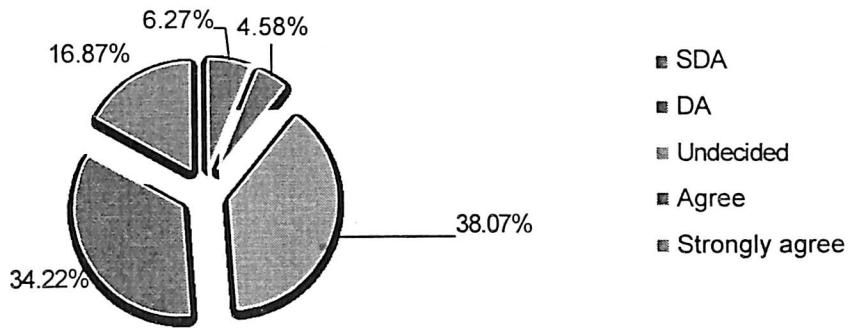


Fig. 4.56: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 56

Training is imparted but its effect on work performance is mediocrely known to employees. This appears to be the view going by the response of about 72.29 percent who feels that such an assessment is carried out. Specifically GUC & OMC1 have endorsed this view. Still 10.85 percent feels that the impact of training on work performance is not assessed. Another huge group of respondents around 38.07 percent remain neutral.

Question 57: Your organization has tie-up with external training institutions for long term specific/organization related programmes for Non-executives / Staff

Table 4.57: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 57

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	4	14	8	9	35	8.43
DA	2	1	8		27	36	8.67
Undecided	3	15	38	32	18	103	24.82
Agree	4	100	25	15	27	167	40.24
Strongly agree	5	8	33	24	9	74	17.83
Total		128	118	79	90	415	100.00

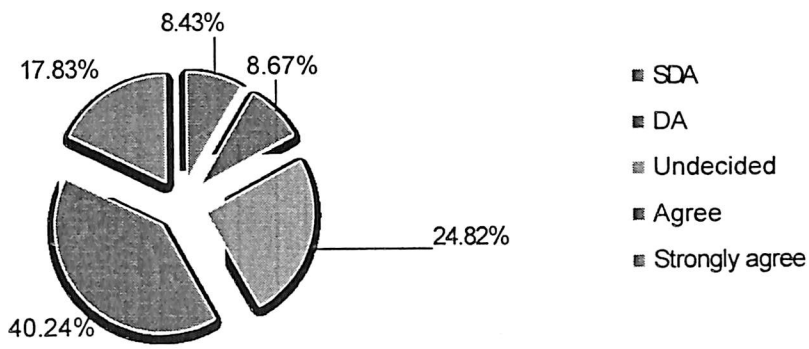


Fig. 4.57: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 57

In this only 58.07 percent of the respondents has conveyed that such a tie-up is available. GUC excels in all organization with 84% endorsement. Overall 17.1 percent does not confirm that an arrangement of that kind exists. Another 24.82 percent has not been able to respond specifically. It appears, going by the large response, GUC seems to have tie-up with external agencies, for imparting long term training for its employees.

Question 58: Such long term training programmes are relevant and useful for Non-executives / Staff

Table 4.58: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 58

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	3		8	9	20	4.82
DA	2	5			9	14	3.37
Undecided	3	5	30	16	36	87	20.96
Agree	4	95	49	47	9	200	48.19
Strongly agree	5	20	39	8	27	94	22.65
Total		128	118	79	90	415	100.00

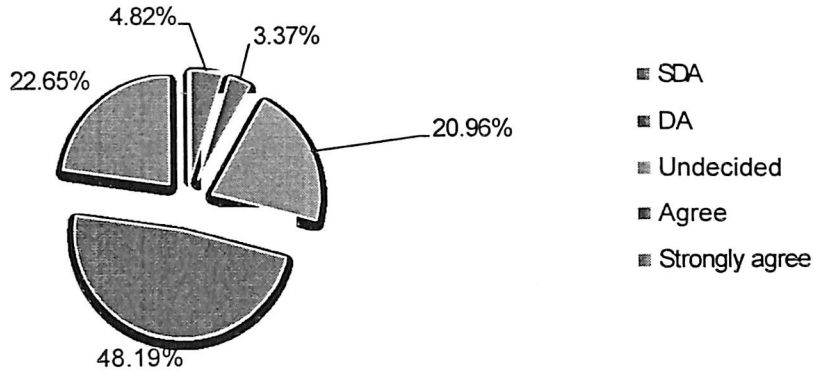


Fig. 4.58: Pie Chart showing the responses of 475 employees of four OIL PSU organizations in accordance to question 58

As a view, this is largely supported. Over 70.84 percent endorses it. A group of 8.19 percent of the respondents does not find it useful. In the undecided category, another 20.96 percent of the respondents have remained undecided.

Question 59: Upon successful completion of such long term training programmes, employees are given financial benefits/promotion for Non-executives / Staff

Table 4.59: Table showing the responses of 415 employees of four OIL PSU organizations in accordance to question 59

Rating	Score	GUC	OMC1	OMC2	OMC3	Total	%age
SDA	1	27	22	39	11	99	23.86
DA	2	8	8	8	32	56	13.49
Undecided	3	18	30	16	28	92	22.17
Agree	4	35	33	8	10	86	20.72
Strongly agree	5	40	25	8	9	82	19.76
Total		128	118	79	90	415	100.00

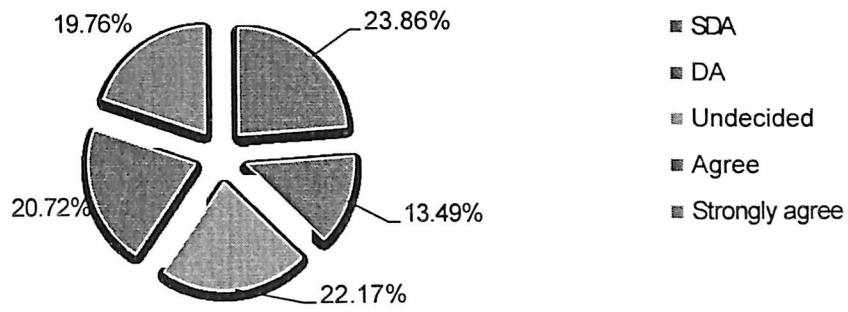


Fig. 4.59: Pie Chart showing the responses of 415 employees of four OIL PSU organizations in accordance to question 59

This practice of granting monetary benefits or promotion to the trained personnel does not seem to be widely prevalent. Only 40.48 percent considers that it is being done in the respective OIL PSU companies. Over 37.35 percent does not feel that such benefits are extended for the trained personnel. Around 22.17 percent has no opinion to express. It is the response from employees of GUC, which gives an indication of such practices being followed in their organization to some extent.

4.2 Testing of Hypothesis & Interpretations

In this Section, the data obtained has been analysed for arriving at decisions on the hypothesis formulated for this research. Before proceeding to apply specific statistical tools, the overall score secured by each of these four OIL PSU organizations is worked out. The following table provides the overall score obtained by GUC, OMC1, OMC2 and OMC3. A bar chart depicting the organization-wise percentage score is also prepared.

Table 4.2.1: Table showing score obtained by four OIL PSU organizations

Organization	Max Score	Obtained Score	%age
GUC	37760	29974	79.38
OMC1	34810	27230	78.22
OMC2	23305	17388	74.61
OMC3	26550	20071	75.60
TOTAL	122425	94663	77.32

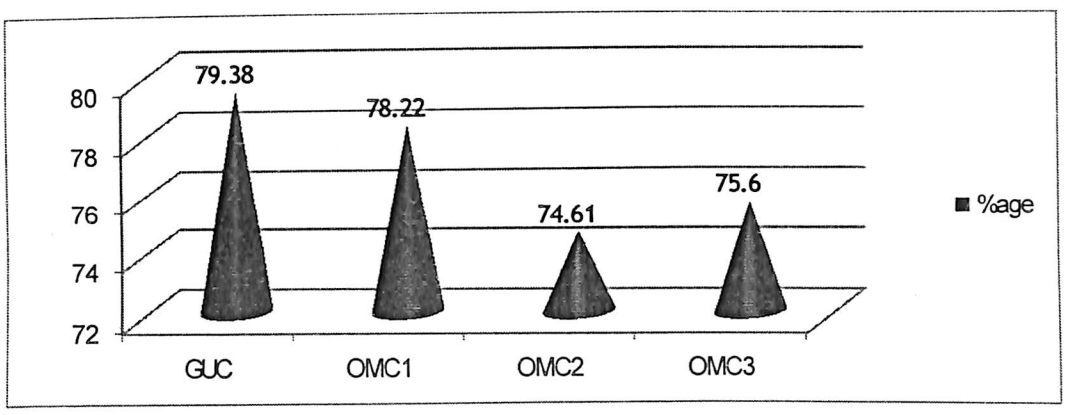


Figure 4.2.1: Bar graph showing percentage score of four OIL PSU organizations & average Score

As stated earlier, the questionnaire intended to capture responses on various elements of the Human Resource Development under study. The percentage of actual score against possible maximum score has been worked out. As the score obtained by each one of these organizations is around 75 percent or above it can be construed that all

these identified elements of the Human Resource Development are widely prevalent in these organizations.

Further, an analysis of the data using relevant and specific statistical tools has been undertaken with the help of Statistical Package for Social Sciences (SPSS)

The table below provides summary of the statistical analysis.

Table 4.2.2: Table showing statistical summary of scores of four OIL PSU organizations

N	**415**
Mean	**228.0554217**
Median	**233**
Mode	**254**
Std. Deviation	**25.592**
Variance	**654.970**
Skewness	**-0.692**
Kurtosis	**0.181**
Range	**131**
Minimum	**157**
Maximum	**288**
Sum	**94643**

This table represents basic statistics of overall best performance. This overall best performance has been derived taking into consideration all the responses of all the 415 respondents on HRD practices sought to be ascertained through the questionnaire administered on them.

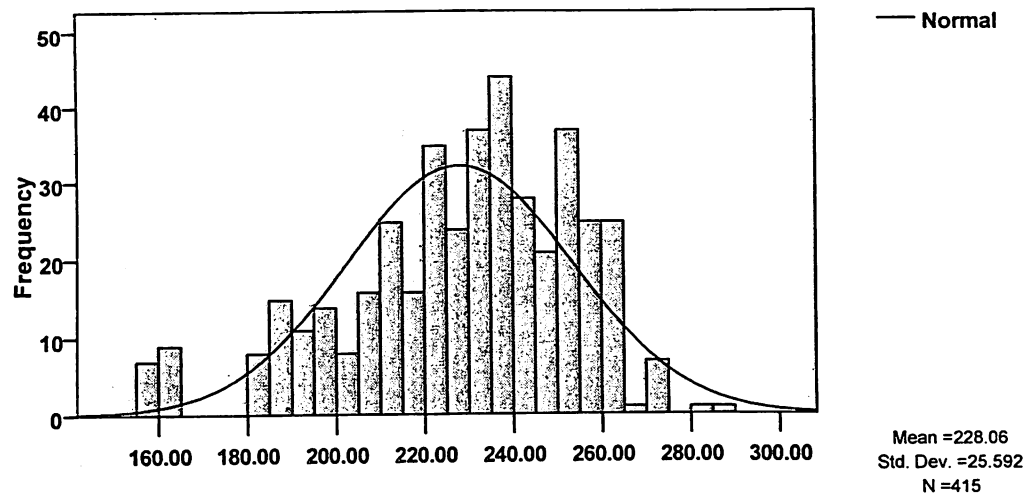


Figure 4.2.2: Histogram showing distribution of data in respect of four OIL PSU organizations

It may be seen from this graph that the frequencies are plotted and a histogram is drawn. Over this a normal curve is superimposed. From the graph it may be seen that the deviation of the obtained distribution from the normal distribution is quite negligible. Also it is seen from the table that the values of mean, median and mode are nearer to each other. The analysis reveals that the data adhere to normal distribution. Therefore this lends itself for a parametric analysis.

The mean of 228.06 represents the rating of all the 415 respondents. The overall best practice has been found to be good. A further analysis in terms of specific hypothesis reveals the extent to which contribution to the overall best practice comes from each of the companies.

The focus of the research was on certain human resource development elements prevalent in the OIL PSU organizations, namely, Manpower Planning, Recruitment & Selection, Career Planning & Growth, Employee Engagement & Special Focus to Non-Executive/Staff Training & Development. Data on various elements of these functions were obtained through questionnaire. For further analysis the data had to be grouped according to the function with which they are associated. The data had been accordingly grouped as applicable to **Manpower Planning (Q1-14), Recruitment & Selection (Q15-22), Career Planning & Growth (Q23-33), Employee Engagement**

(Q34-40) & Special Focus to Non-Executive/Staff Training & Development (Q41-59). For those groups of questions, score values were assigned in terms of the responses given by the respective respondents namely executives/managers or staff/workmen or both as the case may be. The analysis done can be explained through the following formula (C.R. Kothari, 1990):

Arithmetic Mean: $M = \frac{\Sigma fx}{N}$

Standard Deviation: $\sigma = \sqrt{\frac{\Sigma f[x - \bar{x}]^2}{\Sigma f}}$

The calculated mean and standard deviation appear in the following table.

Table 4.2.3: Table showing Mean and Standard Deviation of different human resource management functions

HRD Practices	N	Minimum	Maximum	Mean	St Deviation
Manpower Planning	415	36	65	48.810	5.773
Recruitment & Selection	415	20	39	32.723	3.938
Career Planning & Growth	415	30	55	42.540	5.800
Employee Engagement	415	15	35	27.516	4.462
Training & Development	415	51	128	76.467	11.659

In the following paragraphs the hypotheses formulated for this research are examined using relevant statistical tools.

H_01: There is no significant relationship between manpower planning and overall best practice

This hypothesis seeks to test whether there is any relationship between manpower planning and overall best practice. Manpower planning is the process of forecasting an organization's further demand for and supply of right type of people in the right number. This consists of several elements. The obtain response on various elements of manpower planning, 14 questions were addressed to employees as they have accept to relevant information in an organization. From the responses thus obtained the score values were worked out and further analysed using necessary statistical tools to examine the hypothesis.

In order to find out whether there is significant relationship between manpower planning and overall best practice a Pearson Product-Moment Coefficient of Correlation (r) has been calculated. The analysis done can be explained through the following formula (C.R. Kothari, 1990):

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[\, n\Sigma x^2 - (\Sigma x)^2 \,][\, n\Sigma y^2 - (\Sigma y)^2 \,]}}$$

The following table provides a summary of the calculation:

Table 4.2.4: Table showing correlation between manpower planning and overall best practice in four OIL PSU organizations

Variable	Mean	S.D	R
Overall best practice	228.055	25.592	0.590**
Manpower planning	48.810	5.773	

****Correlation is significant at the 0.01 level.**

It may be seen that the correlation coefficient is significant at 0.01 levels. Consequently, the above null hypothesis is rejected. This means that manpower planning and overall best practice have strong relationship. In other words, who's who feel that the manpower planning is good, further feel that the overall best practice is also good.

$H_0$2: There is no significant difference among the four OIL PSU organizations in Manpower Planning

Table 4.2.5: Table showing means scores of four OIL PSU organizations in Manpower Planning

Organization	Mean	N	Standard Deviation
GUC	47.5859375	128	5.9506
OMC1	51.9745763	118	5.5276
OMC2	48.1266	79	5.8296
OMC3	47.0000	90	3.9206
Total	48.6718	415	5.3071

The following bar graph represents the mean scores on manpower planning obtained by all the four power OIL PSU organizations.

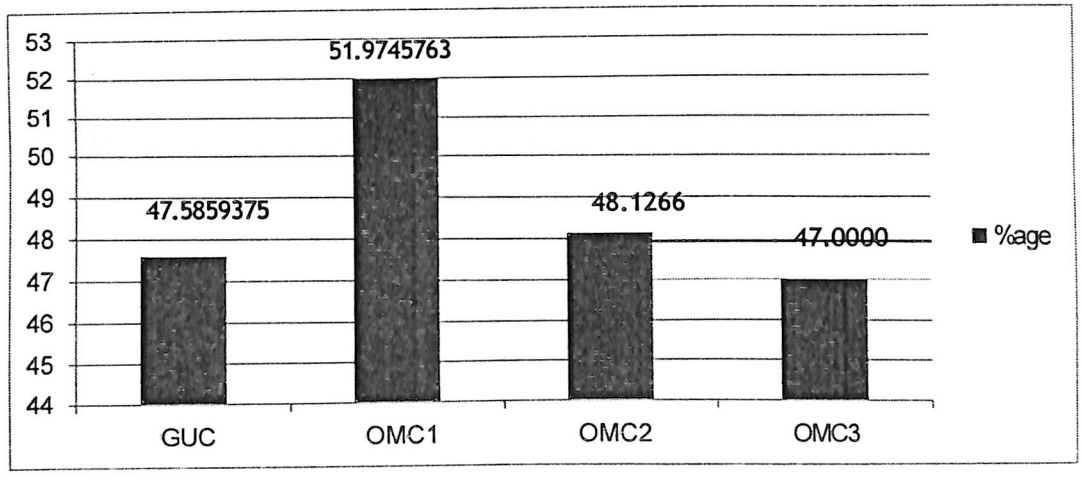


Figure 4.2.3: Bar graph showing means scores of four OIL PSU organizations in Manpower Planning

It may be seen that based on the mean values and what is represented on the graph that OMC1 has a higher score and therefore has better manpower planning practice

than other three OIL PSU organizations. OMC2, GUC & OMC3 follows closely in chronological order.

Further, to ascertain whether there is significant difference among the four OIL PSU companies in manpower planning, the analysis of variance (ANOVA) test has been carried out. The analysis done can be explained through the following formula (C.R. Kothari, 1990):

$$= \frac{\mu_b}{\mu_w}$$

The following table provides the results of the test:

Table 4.2.6: Table showing analysis of variance (ANOVA) value in manpower planning in four OIL PSU organizations

	Sum of Squares	df	Mean Square	F
Between Groups	1705.249	3	568.4162841	19.322
Within Groups	12090.71	411	29.4177922	
Total	13795.96	414		

Significant at 0.05 level

The calculated F value of 19.322 is higher than the Table value of 2.65 at 0.05 levels. Therefore the hypothesis that there is no significant difference among the OIL PSU organizations in manpower planning is rejected. In other words, there is considerable difference among these four OIL PSU organizations.

The researcher is further interested in knowing the relative difference among these four organizations in respect of manpower planning. To ascertain this, t-test has been conducted. Each organization is compared with other organizations. This has to be resulted in six comparisons. The analysis done can be explained through the following formula:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{n_1} + \frac{\sigma^2}{n_2}}} (P - 2S_2)$$

The results are explained with the support of the following tables:

Table 4.2.7: Table showing comparison between GUC and OMC1 in manpower planning

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	47.586	5.951	-4.389	244	-5.979**
OMC1	118	51.975	5.528			

**Significant at 0.05 level

The t-value of 5.979 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC1. Negative t-value indicates OMC1 has significantly better manpower planning practice than GUC.

Table 4.2.8: Table showing comparison between GUC and OMC2 in manpower planning

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	47.586	5.951	-0.5406	205	-0.640**
OMC2	79	48.127	5.830			

The t-value of .640 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between GUC and OMC2. In other words, GUC & OMC2 has same manpower planning practices.

Table 4.2.9: Table showing comparison between GUC and OMC3 in manpower planning

Organization	N	Mean	S.D	Difference of Means	Df	t
GUC	128	47.586	5.951	0.586	216	0.817
OMC3	90	47.000	3.9206			

N.S = Not significant

The t-value of 0.817 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC3. In other words, GUC and OMC3 have similar level of manpower planning practices.

Table 4.2.10: Table showing comparison between OMC2 and OMC3 in manpower planning

Organization	N	Mean	S.D	Difference of Means	Df	t
OMC2	79	48.127	5.830	1.127	167	1.490**
OMC3	90	47.000	3.921			

**Not Significant at .05

The t-value of 1.49 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC2 and OMC3. In other words, OMC2 & OMC3 has same level of manpower planning practice.

The need of comparison between OMC1 & OMC2/OMC3 not felt as these 04 t-tests is sufficient to determine the positons of all 04 organisations in respect of Manpower Planning. The t-tests thus concluded, indicate that OMC1 has better manpower panning practice compared to GUC, OMC2 & OMC3. So far as its comparison between GUC, OMC2 & OMC3 is concerned, it has been found that there is no significant difference between these companies. In other words, in these three organizations, the manpower planning practice is of similar level.

$H_0$3: There is no significant relationship between Manpower Acquisition and overall best practice.

This hypothesis seeks to test whether there is any relationship between manpower acquisition process and overall best practice. **Manpower acquisition refers to recruitment and selection** of personnel to the meet the organizational requirement in terms of the planning already made. This consists of several elements. To obtain response on various elements of manpower acquisition, 8 questions were addressed to respondents. From the responses thus obtained the score values were worked out and further analysed using necessary statistical tools to examine the hypothesis.

In order to find out whether there is significant relationship between manpower acquisition process and overall best practice a Pearson Product-Moment Coefficient of Correlation (r) has been calculated.

The following table provides the summary of the calculation:

Table 4.2.11: Table showing correlation between manpower acquisition process and overall best practice in four power OIL PSU organizations

Variable	Mean	S.D	R
Overall best practice	228.055	25.592	0.733**
Manpower Acquisition Process	32.723	3.938	

**Significant at 0.01 level

It may be seen that the correlation coefficient is significant at 0.01 levels. Consequently, the above null hypothesis is rejected. This means that manpower acquisition process and overall best practice have strong relationship. In other words, those who feel that the manpower acquisition process is good, further feel that the overall best practice is also good.

$H_0$4: There is no significant difference among the four OIL PSU organizations in manpower acquisition process

In order to analyses the extent to which there is significant difference among the four OIL PSU organizations in manpower planning, the mean and standard deviation values were calculated for manpower acquisition process, organization-wise, based on the score values derived from the responses of the respective respondents.

The data is given in the following table:

Table 4.2.12: Table showing mean and standard deviation value of manpower acquisition process in four OIL PSU organizations

Organization	Mean	N	S.D
GUC	33.445	128	1.783
OMC1	33.051	118	4.602
OMC2	32.114	79	4.638
OMC3	32.900	90	5.349
Total	32.878	504	4.093

The following bar graph represents the mean scores on manpower acquisition process obtained by all the four OIL PSU organizations.

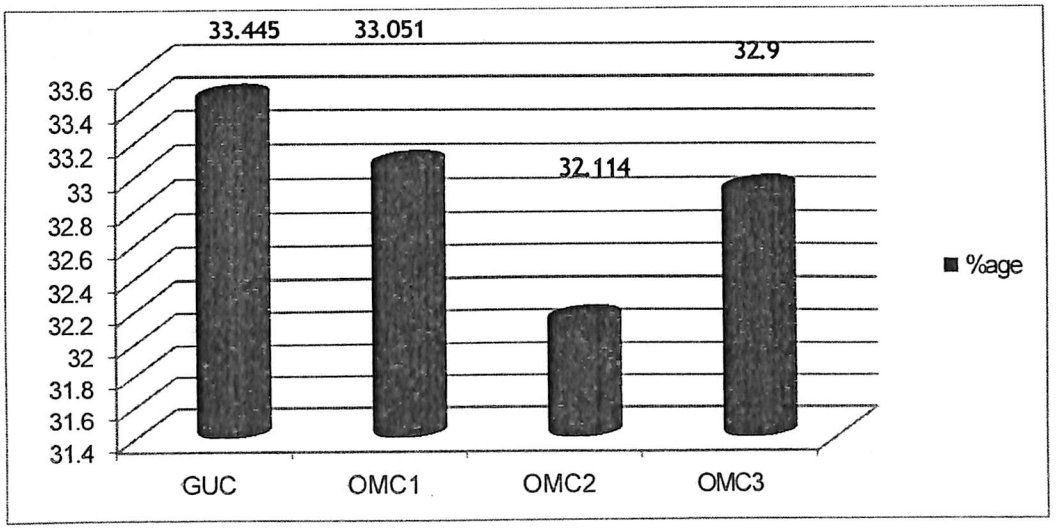


Figure 4.2.4: Bar graph showing mean values of manpower acquisition process in four OIL PSU organizations

It may be seen that based on the mean values and what is depicted on the graph that GUC has a high score and therefore is considered to have better manpower acquisition process than other three OIL PSU stations. OMC1, OMC3 and OMC2 come next in this order.

Further, to ascertain whether there is significant difference among the four OIL PSU organizations in manpower acquisition process, the analysis of variance (ANOVA) test has been carried out. The following table provides the result of the test:

Table 4.2.13: Table showing analysis of variance (ANOVA) value in manpower acquisition in four OIL PSU organizations

	Sum of Squares	Df	Mean Square	F
Between Groups	111.131	3	37.0436	2.414*
Within Groups	6308.002	411	15.3479	
Total	6419.133	414		

**Not Significant at 0.05 levels

The calculated F value of 2.41 is lower than the Table value of 2.65 at 0.05 levels. Therefore the hypothesis that there is no significant difference among the OIL PSU organizations in manpower acquisition is accepted. In other words, there is No significant difference among these four OIL PSU organizations for acquisition process

As such, in these four OIL PSU organizations, the manpower acquisition process is of similar level. However, considering mean values, they can be ranked in the order of GUC, OMC1, OMC3 and OMC2.

$H_0$5: There is no significant relationship between Career Planning & Growth and overall best practice.

This hypothesis seeks to test whether there is any relationship between Career Planning & Growth and overall best practice. Career Planning & Growth refers to progress of a person is some profession or in an organization. It is a formal approach used by organizations to ensure that employees can climb the ladder of hierarchy within an organization. From an employee's stand point; it is recognition of his

service. While executives/managers are elevated to higher positions based on seniority-cum-merit or merit alone, the common practice followed in the case of staff/workmen is promotion based on seniority. Considering this aspect, 11 questions were addressed to respondents to obtain information on Career Planning & Growth. From the responses thus obtained the score values were worked out and further analysed using necessary statistical tools to examine the hypothesis.

In order to find out whether there is significant relationship between Career Planning & Growth and overall best practice a Person Product-Moment Coefficient of Correlation (r) has been calculated. The following table provides the summary of the calculation:

Table 4.2.14: Table showing correlation between Career Planning & Growth and overall best practice in four OIL PSU organizations

Variable	Mean	S.D	R
Overall best practice	228.055	25.592	0.848 **
Career Planning & Growth	42.540	5.800	

**Significant at 0.01 level

It may be seen that the correlation coefficient is significant at 0.01 levels. Consequently, the above null hypothesis is rejected. This means that Career Planning & Growth and overall best practice have strong relationship. In other words, those who feel that the Career Planning & Growth is good, further feel that the overall best practice is also good.

$H_0$6: There is no significant difference among the four OIL PSU organizations Career Planning & Growth Schemes

In order to analyses the extent to which there is significant difference among the four OIL PSU organizations in Career Planning & Growth schemes, the mean and standard deviation values were calculated for Career Planning & Growth, organization-wise, based on the score values derived from the responses of the respective respondents.

The data is given in the following table:

Table 4.2.15: Table showing mean and standard deviation value of Career Planning & Growth schemes in four OIL PSU organizations

Organization	Mean	N	Std. Deviation
GUC	43.922	128	3.3429
OMC1	43.763	118	6.1833
OMC2	39.3165	79	6.0331
OMC3	41.8000	90	6.6217
Total	42.200	415.000	5.545

The following bar graph represents the mean scores on Career Planning & Growth schemes obtained by all the four OIL PSU organizations.

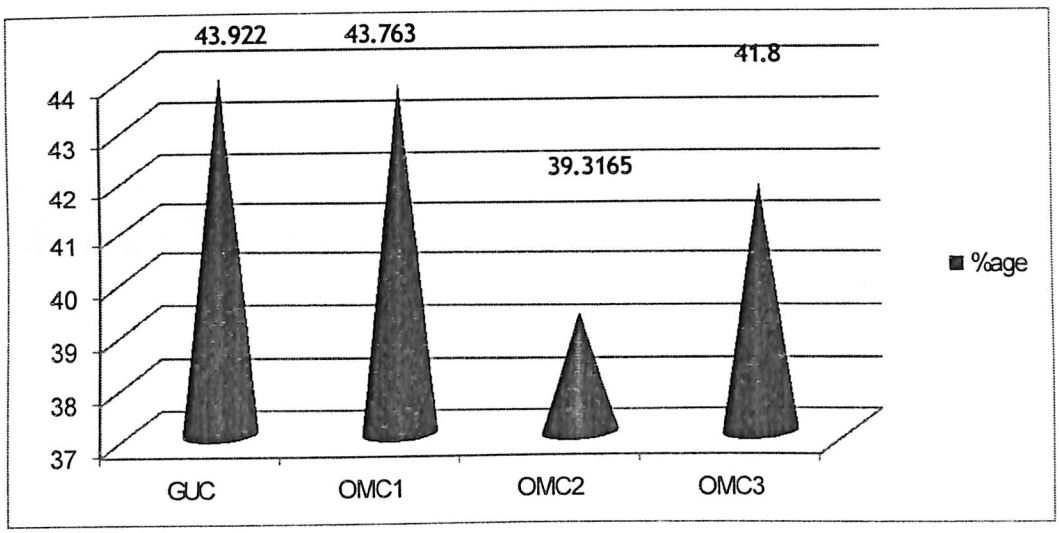


Figure 4.2.5: Bar graph showing mean values of Career Planning & Growth schemes in four OIL PSU organizations

It may be seen that based on the mean values and what is depicted on the graph that GUC has a higher score and therefore is considered to have better Career Planning & Growth schemes than other OIL PSU organizations. OMC1 and OMC3 closely follow GUC. OMC2 comes thereafter.

Further, to ascertain whether there is significant difference among the four OIL PSU organizations in Career Planning & Growth schemes the analysis of variance (ANOVA) test has been carried out. The following table provides the result of the test:

Table 4.2.16: Table showing analysis of variance (ANOVA) value in Career Planning & Growth schemes in four OIL PSU organizations

	Sum of Squares	df	Mean Square	F
Between Groups	1291.03	3	430.344	14.00**
Within Groups	12634.06	411	30.740	
Total	13925.09	414		

**Significant at 0.05 level

The calculated value of 14.00 is higher than the Table value of 2.65 at 0.05 levels. Therefore the hypothesis that there is no significant difference among the four OIL PSU organizations in respect of Career Planning & Growth scheme is rejected.

In other words, there is considerable difference among these four OIL PSU organizations.

The researcher is further interested in knowing the relative difference among these four organizations in respect of Career Planning & Growth schemes. To ascertain this, t-test has been conducted. Each organization is compared with other organizations. This has resulted in six comparisons.

Table 4.2.17: Table showing comparison between OMC1 and GUC in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	43.922	3.343	0.1592	244	0.254
OMC1	118	43.763	6.183	0.1592		

** Not Significant at 0.05 levels

The t-value of .254 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between GUC & OMC1. In other words, the Career Planning & Growth scheme in OMC1 & GUC are similar.

Table 4.2.18: Table showing comparison between OMC2 and GUC in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	43.922	3.343	4.605	205	7.063 **
OMC2	79	39.316	6.033			

**Significant at 0.5 level

The t-value of 7.063 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC2. In other words, the Career Planning & Growth scheme in GUC is better than OMC2.

Table 4.2.19: Table showing comparison between OMC3 and GUC in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	df	T
GUC	128	43.922	3.343	2.122	216	3.12**
OMC3	90	41.800	6.622			

**Significant at 0.05 level

The t-value of 3.12 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC3. In other words, the Career Planning & Growth scheme in GUC is better than OMC3.

Table 4.2.20: Table showing comparison between OMC1 and OMC2 in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	df	T
OMC1	118	43.763	6.183	4.446	195	4.995
OMC2	79	39.316	6.033			

**Significant at 0.05 level

The t-value of 4.995 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between OMC1 and OMC2. In other words, the Career Planning & Growth scheme in OMC1 is better than OMC2.

Table 4.2.21: Table showing comparison between OMC3 and OMC1 in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	Df	T
OMC1	118	43.763	6.183	1.963	206	2.20
OMC3	90	41.800	6.622			

**Significant at 0.05 level

The t-value of 2.2 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between OMC1 and OMC3. In other words, the Career Planning & Growth scheme in OMC1 is better than OMC3.

Table 4.2.22: Table showing comparison between OMC3 and OMC2 in Career Planning & Growth

Organization	N	Mean	S.D	Difference of Means	df	T
OMC3	90	41.800	6.622	2.48	167	2.54**
OMC2	79	39.316	6.033			

**Significant at 0.05 level

The t-value of 2.54 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between OMC3 and OMC2. In other words, the Career Planning & Growth scheme in OMC3 is better than OMC2.

The t-test results indicate that GUC & OMC1 have similar Career Planning & Growth Schemes & both are significantly different than OMC2 & OMC3. GUC and OMC1 are considered to be of better level in respect of Career Planning & Growth schemes with OMC2 and OMC3. Further OMC3 is better than OMC2. As such, as per mean values the chronological position of these OIL PSUs are GUC, OMC1, OMC3 followed by OMC2 in respect of Career Planning & Growth schemes.

$H_0$07: There is no significant relationship between employee engagement level and overall best practice.

This hypothesis seeks to test whether there is any relationship between engagement level and overall best practice. Engagement is the complex of force starting and keeping a person at work in an organization. It is the willingness to expend energy to achieve a goal or reward. Engagement is the set of force to cause people to behave in a certain ways. As engaged employees are always looking for better ways to do a job, it has gained significant position in the literature of human resource management. Seven questions were addressed to respondents to obtain information on employee engagement. Form the responses thus obtained the score values were worked out and further analysed using necessary statistical tools to examine the hypothesis.

In order to find out whether there is significant relationship between employee engagement level and overall best practice, a Pearson Product-Moment Coefficient of Correlation (r) has been calculated.

The following table provides a summary of the calculation:

Table 4.2.23: Table showing correlation between employee engagement level and overall best practice in four OIL PSU organizations

Variable	Mean	S.D	R
Overall best practice	228.055	25.592	0.820**
Manpower planning	27.516	4.462	

**Significant at 0.01 level

It may be seen that the correlation coefficient is significant at 0.01 levels. Consequently, the above null hypothesis is rejected. This means that employee engagement level and overall best practice have strong relationship. In other words, those who feel that the engagement level is good, further feel that overall best practice is also good.

$H_0$08: There is no significant difference among the four OIL PSU organizations in employee engagement level

In order to analyses the extent to which there is significant difference among the four OIL PSU organizations in employee engagement level, the mean and standard deviation values were calculated for employee engagement, organization-wise, based on the score values derived from the responses of the respective respondents.

Table 4.2.24: Table showing mean and standard deviation in respect of employee engagement level in four OIL PSU organizations

Organization	Mean	N	S.D
GUC	28.695	128	2.3895
OMC1	26.593	118	2.3895
OMC2	26.658	79	4.2211
OMC3	27.800	90	6.1135
Total	27.437	415.000	3.778

The following bar graph represents the mean scores on employee engagement level obtained by all the four OIL PSU organizations.

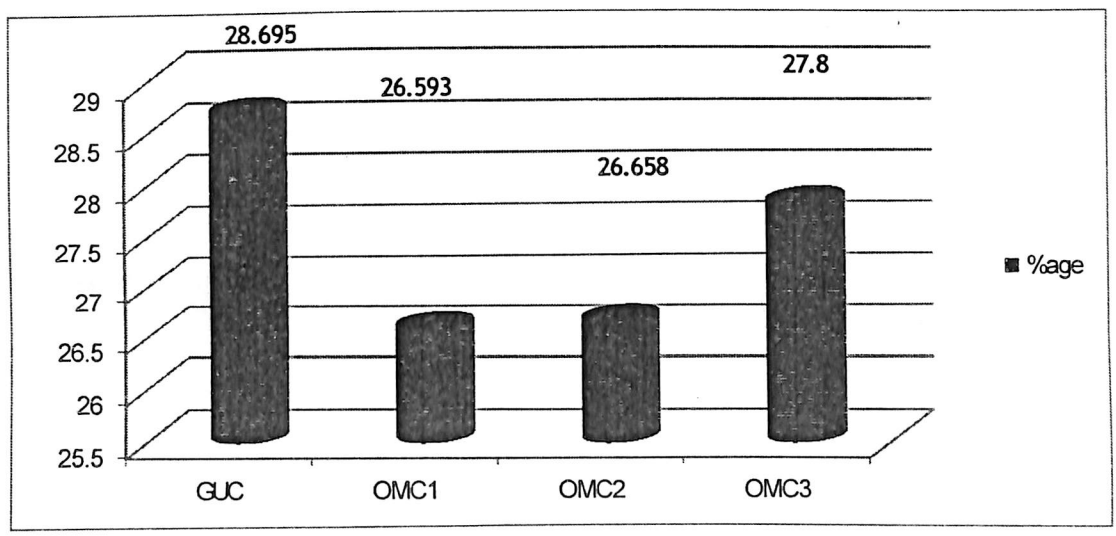


Figure 4.2.6: Bar graph showing mean values in respect of employee engagement level in four OIL PSU organizations

It may be seen that based on the mean values and what is represented on the graph that GUC and OMC3 have almost same score and are therefore considered to have better employee engagement level than other two OIL PSU organizations. OMC2 and OMC1 follow them in that order.

Further, to ascertain whether there is significant difference among the four OIL PSU companies in employee engagement level the analysis of variance (ANOVA) test has been carried out. The following table provides the results of the test:

Table 4.2.25: Table showing analysis of variance (ANOVA) value in employee engagement level

	Sum of Squares	do	Mean Square	F
Between Groups	343.884	3	114.628	5.964
Within Groups	7899.764	411	19.221	
Total	8243.648	414		

**Significant at 0.05 level

The calculated F value of 5.96 is higher than the Table value of 2.65 at 0.05 levels. Therefore the hypothesis that there is no significant difference among the OIL PSU stations in employee engagement level is rejected. In other words there is considerable difference among these four OIL PSU organizations.

The researcher is further interested in knowing the relative difference among these four organizations in respect of employee engagement level. To ascertain this, t-test has been conducted. Each organization is compared with other organizations. This has resulted in six comparisons.

The results are explained with the support of the following tables:

Table 4.2.26: Table showing comparison between OMC1 and GUC in employee engagement level

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	28.695	2.389	2.1	244	4.56**
OMC1	118	26.593	4.584			

**Significant at 0.05 level

The t-value of 4.56 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC1. In other words, the employee engagement level in GUC is better than OMC1.

Table 4.2.27: Table showing comparison between GUC and OMC2 in employee engagement level

Organization	N	Mean	S.D	Difference of Means	df	T
GUC	128	28.695	2.389	2.037	205	4.43**
OMC2	79	26.658	4.221			

**Significant at 0.05 level

The t-value of 4.43 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC2. In other words, the employee engagement level in GUC is better than OMC2.

Table 4.2.28: Table showing comparison between GUC and OMC3 in employee engagement level

Organization	N	Mean	S.D	Difference of Means	df	T
GUC	28.70	2.39	28.70	0.895	216	1.503 (NS)
OMC3	27.80	6.11	27.80			

N.S = Not significant

The t-value of 1.503 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between GUC and OMC3. In other words, the employee engagement level in GUC and OMC3 are considered to be on same level.

Table 4.2.29: Table showing comparison between OMC1 and OMC2 in employee engagement level

Organization	N	Mean	S.D	Difference of Means	Df	T
OMC1	118	26.593	4.584	.065	195	0.101 (N.S)
OMC2	79	26.658	4.221			

N.S = Not significant

The t-value of 0.101 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC1 and OMC2. In other words, the employee engagement level in OMC1 and OMC2 are considered to be on same level.

Table 4.2.30: Table showing comparison between OMC3 and OMC1 in employee engagement level

Organization	N	Mean	S.D	Difference of Means	Df	T
OMC3	90	27.800	6.114	1.21	206	1.627**
OMC1	118	26.593	4.584			

**Not Significant at 0.05 levels

The t-value of 1.627 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC1 and OMC3. In other words, the employee engagement level in OMC1 and OMC3 are considered to be on same level.

Table 4.2.31: Table showing comparison between OMC3 and OMC2 in employee engagement level

Organization	N	Mean	S.D	Difference of Means	Df	T
OMC3	90	27.800	6.114	1.142	167	1.39**
OMC2	79	26.658	4.221			

**Not Significant at 0.05 levels

The t-value of 1.39 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC2 and OMC3. In other words, the employee engagement level in OMC2 and OMC3 are considered to be on same level.

The t-test results reveal that there is no significant difference between GUC and OMC3 in regard to employee engagement and they are therefore of the similar level. They are however better compared to the remaining two OIL PSU organizations, namely, OMC1 and OMC2. It is also seen that there is no significant difference between OMC1, OMC3 and OMC2 and hence these three OIL PSU organizations have similar employee engagement level.

The mean value obtained by GUC is marginally higher than that of OMC3. Therefore, GUC may be construed to have better engagement level than OMC3 has.

From the mean values it is seen that GUC, OMC3, OMC2 & OMC1 are considered to be in chronological order in employee engagement.

$H_0$9: There is no significant relationship between Training & Development (Focus to Non-Executives only) and overall best practice.

This hypothesis seeks to test whether there is any relationship between Training & Development (Focus to Non-Executives only) and overall best practice. Training is a process of learning a sequence of programmed behaviour. It is application of knowledge. It attempts to improve the employees' performance on the current job and prepare them for an intended job. Development is a related process. It covers not only

those activities which improve job performance but also those which bring about growth of the personality. Training & Development (Focus to Non-Executives only) consists of several elements. To obtain response on various elements of training and development, 19 questions were addressed Respondents. From the responses thus obtained the score values were worked out and further analysed using necessary statistical tools examine the hypothesis.

In order to find out whether there is significant relationship between training and development and overall best practice a Pearson Product-Moment Coefficient Correlation (r) has been calculated. The following table provides the summary of the calculation:

Table 4.2.32: Table showing correlation between Training & Development (Focus to Non-Executives only) and over best practice in four OIL PSU organizations

Variable	Mean	S.D	R
Overall best practice	228.06	25.59	0.920**
Training & Development (Focus to Non-Executives only)	76.47	11.66	

**Significant at 0.01 level

It may be seen that the correlation coefficient is significant at 0.01 levels. Consequently, the above null hypothesis is rejected. This means that Training & Development (Focus to Non-Executives only) overall best practice have strong relationship. In other words, those who feel that the Training & Development (Focus to Non-Executives only) is good, further feel that the overall best practice is also good.

$H_0$10: There is no significant difference among the four OIL PSU organizations in training and development

In order to analyses the extent to which there is significant difference among the four OIL PSU organizations in training and development, the mean and standard deviation values were calculated for training and development, organization-wise, based on the

score values derived from the responses of the respective respondents. The data is given in the following table:

Table 4.2.33: Table showing mean and standard deviation values of Training & Development (Focus to Non-Executives only) of four OIL PSU organizations

Organization	Mean	N	Std. Deviation
GUC	80.516	128	6.915
OMC1	75.381	118	11.180
OMC2	73.886	79	10.435
OMC3	73.511	90	14.509
Total	75.824	415.000	10.760

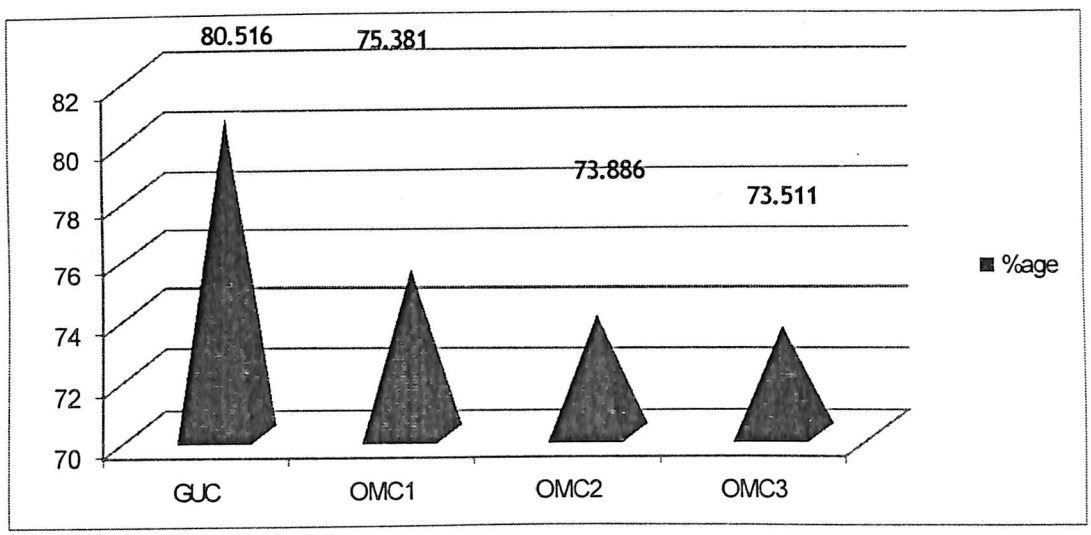


Figure 4.2.7: Bar graph showing mean values of Training & Development (Focus to Non-Executives only) in four OIL PSU organizations

It may be seen that based on the mean values and what is represented on the graph that GUC has a higher score and is therefore considered to have better Training &

Development (Focus to Non-Executives only) practice than other four OIL PSU organizations. It is followed by OMC1, OMC2 & OMC3 come next in that order.

Further, to ascertain whether there is significant difference among the four OIL PSU organizations, in Training & Development (Focus to Non-Executives only), the analysis of variance (ANOVA) test has been carried out.

The following table provides the results of the test:

Table 4.2.34: Table showing analysis of variance (ANOVA) value in Training & Development (Focus to Non-Executives only)

	Sum of Squares	df	Mean Square	F
Between Groups	4247.54	3	1415.847	11.186**
Within Groups	52023.77	411	126.579	
Total	56271.31	414		

**Significant at 0.01 level

The calculated F value of 11.186 is higher than the Table value of 2.65 at 0.05 levels. Therefore the hypothesis that there is no significant difference among the OIL PSU organizations in Training & Development (Focus to Non-Executives only) is rejected. In other words, there is considerable difference among these four OIL PSU organizations in Training & Development (Focus to Non-Executives).

The researcher is further interested in knowing the relative difference among these four organizations in respect of training and development. To ascertain this, t-test has been conducted. Each organization is compared with other organizations. This has resulted in six comparisons.

The results are explained with the support of the following tables:

Table 4.2.35: Table showing comparison between GUC and OMC1 in Training & Development (Focus to Non-Executives)

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	81.141	8.949	5.759	244	4.77**
OMC1	118	75.381	11.180			

**Significant at 0.05 levels

The t-value of 4.77 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC1. In other words, Training & Development (Focus to Non-Executives only) in GUC is better than OMC1.

Table 4.2.36: Table showing comparison between GUC and OMC2 Training & Development (Focus to Non-Executives only)

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	81.141	8.949	7.255	205	5.31**
OMC2	79	73.886	10.435			

**Significant at 0.05 level

The t-value of 5.31 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC & OMC2. In other words, Training & Development (Focus to Non-Executives only) in GUC is better than OMC2.

Table 4.2.37: Table showing comparison between OMC3 and GUC in training and development.

Organization	N	Mean	S.D	Difference of Means	Df	T
GUC	128	81.141	128	7.63	216	4.79**
OMC3	90	73.511	90			

**Significant at 0.05 level

The t-value of 4.79 is higher than the Table value of 1.96 at significance level 0.05. Therefore there is significant difference between GUC and OMC3. In other words, the Training & Development (Focus to Non-Executives only) in GUC is better than OMC3.

Table 4.2.38: Table showing comparison between OMC2 and OMC1 in Training & Development (Focus to Non-Executives only)

Organization	N	Mean	S.D	Difference of Means	Df	T
OMC1	118	75.381	11.180	1.49	195	0.94**
OMC2	79	73.886	10.435			

**Not Significant at 0.05 levels

The t-value of 0.94 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC1 and OMC2. In other words, the Training & Development (Focus to Non-Executives only) in OMC1 and OMC2 can be considered to be of similar level.

Table 4.2.39: Table showing comparison between OMC3 and OMC1 in Training & Development (Focus to Non-Executives only)

Organization	N	Mean	S.D	Difference of Means	df	T
OMC1	118	75.381	11.180	1.87	206	1.05**
OMC3	90	73.511	14.509			

N.S = Not significant

The t-value of 1.05 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC1 and OMC3. In other words, the Training & Development (Focus to Non-Executives only) in OMC1 and OMC3 can be considered to be of similar level.

Table 4.2.40: Table showing comparison between OMC3 and OMC2 in Training & Development (Focus to Non-Executives only)

Organization	N	Mean	S.D	Difference of Means	df	T
OMC2	79	73.886	10.435	0.190	167	.375 (N.S)
OMC3	90	73.511	14.509			

N.S = Not significant

The t-value of .375 is lower than the Table value of 1.96 at significance level 0.05. Therefore there is no significant difference between OMC3 and OMC2. In other words, the Training & Development (Focus to Non-Executives only) in OMC3 and OMC2 can be considered to be of similar level.

The t-test results show the GUC is better compared to OMC1, OMC2 and OMC3 in regard to Training & Development (Focus to Non-Executives only) practice. OMC1, OMC2 and OMC3 are considered to be of similar level in Training & Development (Focus to Non-Executives only) practice. However, considering the mean values it can be construed that GUC, OMC1, OMC2 and OMC3 are in chronological order in terms of Training & Development (Focus to Non-Executives only) practice the four OIL PSU organizations.

CHAPTER 5
SUMMARY, CONCLUSIONS AND SUGGESTIONS

CHAPTER 5

SUMMARY, CONCLUSIONS AND SUGGESTIONS

5.1 SUMMARY AND CONCLUSIONS

As stated earlier, the broad objective of the research was to study the HRD practices in selected Oil & Gas Sector organizations and to identify / benchmark the best practices. The specific objectives were related to Manpower Planning, Recruitment & Selection, Career Planning & Growth, Employee Engagement and Training and Development of Non-executives /staff. The hypotheses were formulated to examine these objectives. This chapter deals with summary and conclusions of the study with respect to the hypotheses.

In regard to Manpower Planning, the first hypothesis intended to examine the relationship between manpower planning and the overall best practices. Manpower planning is a constituent of the overall best practices. However, how significant the relationship between the two was sought to be known. It was tested using coefficient of correlation tool. As the obtained correlation between manpower planning and overall best practice is significant, they have strong relationship.

The next hypothesis intended to find out the differences in manpower planning among the four Oil PSU organizations. It assumed that there was no difference. ANOVA test was conducted to find out the position.

The result of ANOVA test has shown that there is significant difference among the four Oil PSU organizations and therefore the hypothesis is rejected.

The next step was to find out the difference between the generating organizations. Each organization was compared with the other-'t' test was conducted for this purpose. While comparing GUC with OMC1, the t-test proves that there is a significant difference between GUC and OMC1. OMC1 has been found to have significantly better manpower planning practice than GUC. Comparing GUC & OMC2, GUC & OMC3 and OMC2 & OMC3 it is found that there no significant difference between these 03 Oil PSU organisations on practices related to Manpower Planning. The need of comparison between OMC1 & OMC2/OMC3 not felt as these 04 t-tests is sufficient to determine the positons of all 04 organisations in respect of Manpower Planning.

Thus the t-tests thus concluded, indicate that OMC1 has better manpower panning practice compared to GUC, OMC2 & OMC3. So far as its comparison between GUC, OMC2 & OMC3 is concerned, it has been found that there is no significant difference between these companies. In other words, in these three organizations, the manpower planning practice is of similar level.

OMC1 is regarded as highly successful organization. The interactions with the employees of OMC1 point out that the employee positioning pattern has been rationalized. It appears that this is one of the factors contributing to the success of OMC1. Employees of OMC1 consider that the staff level is adequate. A specific conversation of this element reveals that both workmen and managers hold the same view.

In regard to Recruitment & Selection, one hypothesis intended to find out if there is significant relationship between Recruitment & Selection process and overall best practice. It was tested using coefficient of correlation tool. As the obtained correlation between Recruitment & Selection and overall best practice is significant, they have strong relationship. The other hypothesis intended to find out the differences in Recruitment & Selection process among the four Oil PSU organizations. It assumed that there was no difference. ANOVA test was conducted to find out the position. The result of ANOVA test has shown that there is no significant difference among the four Oil PSU organizations and therefore the hypothesis is accepted. In other words, there is No significant difference among these four OIL PSU organizations on Recruitment & Selection process.

As such, in these four OIL PSU organizations, the Recruitment & Selection process is of similar level. However, considering mean values, they can be ranked in the order of GUC, OMC1, OMC3 and OMC2.

Regarding Career Planning & Growth the hypothesis intended to find out the existence of relationship between Career Planning & Growth and overall best practice. The obtained correlation value between Career Planning & Growth and overall best practice is significant. This means that the Career Planning & Growth and overall best practice have strong relationship.

The other hypothesis sought to find out the differences among the four Oil PSU organizations in Career Planning & Growth. ANOVA test was conducted. The result shows that there is significant difference among four generating organizations thus hypothesis was rejected.

To know the relative difference among these four organizations in respect of Career Planning & Growth schemes, t-test was conducted. Each organization was compared with the others resulting in six comparisons. Comparison of GUC and OMC1 in Career Planning & Growth indicates that there is no significant difference between GUC and IOC and both can be considered to be at similar level. Comparison of GUC with OMC2 and OMC3 in Career Planning & Growth reveals that there is significant difference between GUC & other two. GUC is significantly better than OMC2 & OMC3 Both. Comparison of OMC1 with OMC2 & OMC3 indicates that OMC1 is ahead of OMC2 & OMC3 both in Career Planning & Growth practices. Similarly comparison between OMC3 & OMC2 indicates that practices related to Career Growth & Planning are better in OMC3.

The t-test results indicate that GUC & OMC1 have similar Career Growth Schemes & both are significantly different than OMC2 & OMC3. GUC and OMC1 are considered to be of better level in respect of career growth schemes with OMC2 and OMC3. Further OMC3 is better than OMC2. As such, as per mean values the chronological position of these OIL PSUs are GUC, OMC1, OMC3 followed by OMC2 in respect of career growth schemes

Best practices study in HR functions was conducted by Nitin Vazirani (2007) covering units in pharmaceutical industry in India. The study examined HR and strategic plans, organizational climate, training and performance management systems. Career planning was also studied. In this one of the elements considered was job rotation. The study suggested linking of performance appraisal with that of career advancement.

It is ascertained that GUC and OMC1 provide good Career Planning & Growth which is mostly based on performance & competency. Both follow seniority up to certain level and selection method for senior levels. Performance appraisal is linked to selection method invariably.

In regard to Employee Engagement, the hypothesis intended to examine whether there is significant relationship between Employee Engagement level and overall best practices. The obtained correlation between motivation level and over all best practice is significant. Therefore they have strong relationship.

The other hypothesis is intended to find out whether there is significant difference among the four Oil PSU organizations in Employee Engagement level. ANOVA test conducted indicates that there is significant difference among four OIL PSU organizations.

The t-test conducted to know the relative difference among the four organizations shows the following six comparisons. Comparison of GUC and OMC1 in Employee Engagement level indicates that there is significant difference between the two. Employee Engagement level in GUC is better than in OMC1. Comparison of GUC and OMC2 shows that there is significant difference between the two. Employee Engagement level in GUC is again better than OMC2. Comparison of GUC and OMC3 reveals that there is no significant difference between the two. Both are considered to be of the similar level. Comparison of OMC1 and OMC2 in Employee Engagement level indicates that there is no significant difference between the two and are considered to be on similar level. Comparison of OMC1 and OMC3 indicates that that there is no significant difference between the two and are considered to be on similar level. Comparison of OMC3 and OMC2 reveals that that there is no significant difference between the two and are considered to be on similar level.

The t-test results reveal that there is no significant difference between GUC and OMC3 in regard to employee engagement and they are therefore of the similar level. They are however better compared to the remaining two OIL PSU organizations, namely, OMC1 and OMC2. It is also seen that there is no significant difference between OMC1, OMC3 and OMC2 and hence these three OIL PSU organizations have similar employee engagement level.

The mean value obtained by GUC is marginally higher than that of OMC3. Therefore, GUC may be construed to have better engagement level than OMC3 has.

From the mean values it is seen that GUC, OMC3, OMC2 & OMC1 are considered to be in chronological order in employee engagement.

Mohd. Zairi and Paul Leonard (1995) suggest that benchmarking human resource issues can be made by using Malcom Baldrige National Quality Award framework. The Malcom Baldrige framework includes a set of values and concepts represented in seven categories one of them being Human Resource Management. The human resource area has five sub headings in the frame work two of which are employee performance and recognition - that deals with various methods used for recognizing employee contribution and rewards and employee wellbeing and morale - that is about how companies maintain and develop further a climate for employee satisfaction. The Oil PSU organizations are well aware of the need to maintain a engaged workforce. The high performance attained by these organizations is said to be the outcome of high employee engagement witnessed among the employees. In particular, GUC is geared to face the future challenges as expressed by its employees.

As far as Training and Development of Non-executives is concerned, the hypothesis considers that there is no significant relationship between Training and Development of Non-executives and overall best practice. The obtained correlation value between training and development and over all best practice is significant. Consequently, training and development and overall best practices have strong relationship.

The other hypothesis assumes that there is no significant difference among the four Oil PSU organizations in Training and Development of Non-executives. To ascertain whether there is significant difference among the four Oil PSU organizations, in Training and Development of Non-executives, the analysis of variance (ANOVA) test was carried out. The result shows that there exists significant difference among these four generating organizations. Therefore the hypothesis is rejected.

To know relative difference among these four organizations in respect of Training and Development of Non-executives, t-test has been carried out. Each organization is compared with others resulting in six comparisons.

Comparison of GUC with OMC1, OMC2 & OMC3 reveals that there is significant difference between them. In other words, Training and Development of Non-executives, in GUC is significantly better than OMC1, OMC2 & OMC3. Comparison of OMC1 with OMC2 & OMC3 reveals that there is no significant difference between them and can be considered to be of the similar level. Comparison of OMC2 and OMC3 reveals that there is no significant difference between them and can be considered on similar level..

Thus the t-test results show the GUC is better compared to OMC1, OMC2 and OMC3 in regard to Training and Development of Non-executives. OMC1, OMC2 and OMC3 are considered to be of similar level in Training and Development of Non-executives. However, considering the mean values it can be construed that GUC, OMC1, OMC2 and OMC3 are in chronological order in terms of Training and Development of Non-executives.

GUC has accorded high priority to Training and Development of Non-executives. This is despite the fact that this organization came to existence very recently compared to the other two organizations. It has a huge training facility. All other organisations also consider Training and Development of Non-executives as an important intervention. It is ascertained that the organization sends substantial number of employees for external training. The other highlight is these organizations sends a number of workers regularly for long term technical

courses meeting the entire cost and providing them adequate weightage in promotion subsequent to successful enhancement of competency.

A huge literature is available which strongly advocates training and development intervention for the performance enhancement. Training and development has win-win outcomes for both employees and employers. A research at Xerox found that post training New Castle branch of Xerox became the top branch in terms of sales and that sales calls to get an order had virtually halved to twenty four (Maninder Singh, 2006).

The business success of leading organizations like Motorola, General Electric and Hewlett Packard is attributed to systematic employee training (Catala Nello and Redding, 1989). This holds good for the OIL PSU organizations.

5.2 RECOMMENDATIONS

This research throws light on practices being followed five elements of human resource development function. Although the HRD practices being followed in these 04 organizations are almost similar but from research point of view, the lead organizations are identified. OMC1 has been found to be the best in Manpower Planning practice where as regards to employees' Recruitment & Selection, all four organisations are on similar level. At Career Planning & Growth segment GUC & OMC1 shares the leader position. Again on Employee Engagement element all organizations seem to be at same level with GUC leads on marginal significance. Finally on Training and Development practices of Non- executives, GUC's practices have been found to be the best in comparison to all other 03 organizations having similar level of Training and Development practices of Non- executives with in their organization.

Recently the role of private sector in Oil & Gas Sector has been increasing. Consequently, competition is experienced by the existing players. The imperatives of executing various related projects on time without cost escalation and operating the refinery , petrochemical plants & other related installations at superior performance level have put a new responsibility on the oil PSU organizations to identify areas for improvement and implementing appropriate management practices.

All the four organizations taken up for study in this research are good ones in terms of performance in the respective fields. The response of employees on various HRD

elements contained in the study reveals that these organizations are regarded highly by their respective employees. It can therefore be said that there is a strong relationship between good HRD practices and better performance towards achieving organizational goals.

Therefore, in this context, it is recommended that Oil Sector PSU organizations desirous of enhancing their performance may compare their human resource functions with these leaders.

It is further suggested that Oil PSU organizations interested in carrying out study of best practices / benchmarking projects in human resource functions may send their senior functionaries to the identified lead organizations to undertake comparative study.

A one off interaction may not be sufficient. The option of deputing a few senior and middle level functionaries connected with HR and operations to the lead organizations to work there for a year or more may prove to be beneficial. The deputationists on return to their parent organizations can seek to implement the best practices they have learnt during deputation. This is quite possible as most of the players are extended arms of the state/central government.

5.3 SUGGESTIONS FOR FUTURE STUDY

The present study has covered only certain HRD elements. It is recommended that similar studies may be conducted on remaining critical human resource elements.

Such a study may be made at inter corporate level where obtaining information could be quicker. Corporates of Oil PSU have closer co-ordination. For instance, there is Petroleum and Natural Gas Regulatory Board (PNGRB) which co-ordinate with Oil & Gas sector. The learning process will be faster in case of corporate level comparisons. It is said that if best practices are not quickly studied and adopted the very practice itself may become not so best owing to efflux of time.

There are multitudes of practices associated with setting up of plants and processes involved in operations of related installations. This study covers only HRD function. Similar study in project management, operation and maintenance of various plant & refineries, procurement of equipment, fuel and other materials, financing and other functions can be undertaken.

At the next level, a comparative study with private sector companies in Oil & Gas segment is likely to make valuable contribution to the sector.

It is further suggested that a study comparing with international organization in Oil & Gas sector might be useful in future. National coordinating organizations like PNGRB may take responsibility for such study.

REFERENCES

Adams, **Thomas J,** (1976), 'The Business of Business', Confield Press, Sanfrancisco, 1976

Aggarwal, **J.C.** and **N.K.Chowdhury**, (1991), 'Indian Economy: Crisis and reforms', Shipra Publications, Delhi, India, 1991

Al, **Kuebler**, (1993), 'The Quest for Excellence 5', Annual Conference of Baldrige Award winners, AT&T Universal Card Services presentation, February 15-17-1993

American Society **for Training and Development**, 'Functions of Human Resource Management', 2003

Amit, R and **J.H.Shoemaker**, (1993), 'Strategic assets and organizational rents', Strategic Management Journal, 14(2), 1993

Anonymous, (2000), 'Growing number of employers jump on e-learning band wagon', HR Magazine 2000

Angelos Denisi and Ricky **W.Griffin**, (2006), 'Human Resource Management', Bizta, 2006

APQC, (2001), 'Benchmarking: A Guide for Your Journey to Best-Practice Processes', APQC's Passport to Success, 2001

Ashton, **David and Alan Felstead**, (1995), 'Training Development', J.Storey (Ed.), Human Resource Management: A critical text, London, Routledge, 1995

Asian Productivity **Organization**, (2005), Benchmarking Training Manual, an APO Best Practice Network Publication, Tokyo, 2005

Asian Productivity Organization, (2005), 'Benchmarking: A Quality and Productivity Improvement Tool', 2005

Aswathappa K, (2004), 'Human Resource and Personnel Management', 2nd Edition, McGraw-Hill Publishing Company Ltd., New Delhi, 2004

Aswathappa K, (2008), 'Human Resource Management: Text and Cases', Fifth Edition. Tata McGraw-Hill Publishing Company Limited, New Delhi, India, (2008)

Barney, J.B., (1992), 'Integrating organizational behaviour and strategy formulation research: A resource-based analysis. In P.Shrivastava, A.Huff and J.Dutton (Editors), Advances in Strategic Management Vol.8, Greenwich, Connecticut: JAI Press, 1992

Beach D.S, (1977), 'Personnel: The Management of People at work', 1977 Beach D.S., (1980) The Management of People at Work, 1980

Beer, M., B.Spector, P.Lawsrence, Quinn Mills and R.E.Waton, (1984), 'Human Resource Management', New York, the Free Press, 1984

Belle Rose Ragins, (1997), 'Diversified Mentoring Relationships in Organizations: A Power Perspective', Academy of Management Review 22, No.2, 1997.

Bhushan Jangla I, HR Folks International, www.hrfolks.com

Bjorn Andersen and Per Gate Pettersen, (1996), American Productivity and Quality Centre, Chapman & Hall, 1996

Blake, R.R. and Mouton, J.S, (1965), 'Managerial Grid', Gulf Publishing Company, Houston, 1965; 'Group Dynamics: Key to Decision Making', Gulf Publishing Company, Houston, 1965; and 'Corporate Excellence Through Grid Organization Development', Gulf Publishing, Houston, 1968

BNA Bulletin to Management, 1996

BNA Bulletin to Management, 1998

BNA Bulletin to Management, 2000

Buckley, R. and Caple J. (2000), 'The Theory and Practice of Training', Kogan Page Limited, London, U.K., 2000

Bureau of National Affairs, (1978), 'Primer of Equal Employment Opportunity', BNA, Washington, DC, 1978

Campbell, J.P., Dunnette, M.D., Lawler E.E. III, & Weick, K.E., Jr., (1970), `Managerial Behaviour, Performance and effectiveness)', McGraw-Hill, New York, 1970

Carolyn Wailey, (1993), 'Training for the 90s: How Leading Companies Focus on Quality Improvement, Technological Change and Customer Service', Employee Relations Today, 1993

Cassen, Robert and Vijay Joshi, (1995), 'India: The future of economic reforms', Oxford University Press, New Delhi, India, 1995

Catalanello, Ralph and John Redding, (1989), 'Three strategic training roles', Training and Development Journal, December 1989

CEA, (2007), Annual Report 2006-2007, Central Electricity Authority, Government of India, New Delhi

Chatterjee N.N, (1980), 'Management of Personnel in Indian Enterprises - Concepts, Practices and Emerging Trends', Allied Book Agency, Calcutta, India, 1980

Chris Mahoney, (2000), `Benchmarking Your Way to Smarter Decisions — human resources management', ACC Communication Inc., BNET.com

Christopher E. Bogan and Michael J. English, (1994), `Benclunarking for Best

Practices - Winning Through Innovative Adaptation', McGraw Hill, Inc., 1994

Clark, Margot Gibb, (1992), 'Improved training of staff becoming essential tool', Peter J.Frost, Vance F.Mitchell and Walter R.Nord (Eds.), HRM Reality: Putting competence in context, South Western Publishing, Ohio, 1992

Conner, K.R., (1991), 'A historical comparison of resource-based Theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm?' Journal of Management, 17(4), 1991

Corbitt, J.A., (1997), 'Benchmarking Your Way to Stellar Performance', National Real Estate Investor, 1997

Cox, A. and Thompson, 1, (1998), 'On the appropriateness of benchmarking', Journal of General Management, 23(3), 1998

Craig R.L, (1976), 'Training and Development Handbook: A Guide to Human Resource Development', 2' Edition, McGraw Hill Book Co., Berkshire, U.K, 1976

Dale Yoder, 1967, 'Personnel Management and Industrial Relations' Prentice Hall, 1967

Dale. S. Bench, 1980, 'Personnel: The management of people at work', Daniel Quinn Mills, (1986), 'Labour Management Relations, McGraw-Hill, New York, 1986

David Dahl and Patrick Pinto, (1977), 'Job Posting, an Industry Survey", Personnel Journal 56, No.1, January 1977

Douglas Hall, (1996), 'Protean Careers of the 215t Century', Academy of Management Executive 10, No.4, 1996.

Dr. Paul Schumann, President of Global Vantage in Austin, Texas

Dr.Mohammed Zairi (1988), Competitive Benchmarking, 1988

Dunn and Stephens, 1972, 'Management of Personnel', McGraw-Hill Book Co. Ltd, New York, 1972

Edward Deci and Richard Ryan, (1985), 'Intrinsic Motivation and Self-Determination in Human Behaviour, Plenum Press, 1985 New York

Encyclopedia of Professional Management, (1978), Grolier International, Danbury, Connecticut, 1978

Ernst and Young, (1992), 'Total Improvement Management', McGraw Hill, 1995 Esther Shein, (1998), 'Team Spirit: IT is Getting Creative with Compensation to Foster Collaboration', PC Week, May 11, 1998

Fairbairns, J. (1991), 'Personnel Management: Plugging the Gap in Training Needs Analysis', 1991

Flippo E.B, 1976, 'Principles of Personnel Management', 1976

Gary Dessler (2004), 'Human Resource Management', Pearson Education, Inc., Ninth Edition, Delhi, India, 2004

Gatewood Robert D. and Field H.S., (1998), 'Human Resource Selection', 4th Edition, TX Dryden Press, Fort Worth, U.S, 1998 George Bohlander, (2002), Managing Human Resources

Gerson R.F. and Gerson R.G., (2006), 'Positive Performance Improvement: A New Paradigm for Optimizing Your Workforce', Davies Black Publishing, Mountain View, CA, U.S., 2006

Ghobadian, A, H.S.Woo, D.Gallear, H.Viney and J.Liu, (2001), 'Benchmarking Concepts and Practice: With particular reference to the Finance Function', The Chartered Institute of Management Accountants, London, 2001

Goyal P., Sharma K. and Jauhari V., (2005), 'The SBI: A progressive study of transformation of a socialist welfare organization into a market entry', Journal of Services Research, 4(2), October 2004-March 2005

Greer, C.R. and T.C. Ireland, (1992), 'Organizational and financial correlates of a "contrarian" human resource investment strategy', Academy of Management Journal, 35(4), 1992

Guest, (1995), 'FIRM Trade Union Industrial Relations in HRM: A Critical Text', Ed. J Storey, Rowdledge

Hammel, G. and C.K.Prahlad, (1994), 'Competing for the Future', Boston, Massachusetts, Harvard Business School Press, 1994

Harley Frazis, Daine Herz and Michael Horrigan, (1995), 'Employer-Provided Training: Results from a New Survey', Monthly Labour Review, May 1995.

Harris, P. (2005), 'Small Businesses — Bask in Training's Spotlight', Training and Development, American Society for Training and Development, February 2005

Harrison, R, (1992), 'Employee Development', Institute of Personnel Management', London, 1992

Henderson (1992), Compensation Management, 1992

Hendry, C. and A.Pettigrew, (1992), 'Patterns of strategic change in the development of human resource management', British Journal of Management, 3(3), 1992

Heneman H.G. III and Heneman RL, (1994), 'Staffing Organizations', Middleton, WI: Mendota House, Middleton, U.S., 1994

Herbert G Heneman Jr and George Seltzer, (1972), 'Manpower planning and forecasting in the firm: An exploratory probe', Elmer H.Burack and James Walker, Manpower Planning and Programme, Allyn & Bacon, Boston, 1972

Higgs, A.C., Papper, E.M., and Carr, L.S (2000), 'Integrating selection with other organizational processes and systems' in J.F.Kehoe (Ed.), Managing Selection in Changing Organizations, Jossey-Bass, San Francisco, 2000

Hilb, M, (1992), 'Management development in western Europe in the 1990s', The International Journal of Human Resource Management, 3(3), 1992

Hurlay, P. (2005), 'It Ain't All About Big Deals — Why Outsource Writing Training', Train ingOutsourcing.com, April 2005

Huselid, Mark A., Susan E. Jackson and Randall S.Schuler, (1997), 'Technical and strategic human resource management effectiveness at determinants of firm performance', Academy of Management Journal, 4(1), 1997

Ian Smith, (2006), "Benchmarking HRD: An Emerging Area of Practice" Paper, La Trob University, Australia, 2006

IIMB, (2004), 'Management Review', 2004

International Game Developers Association, (2003), 'Human Resources Benchmarking: A Study of International Best Practices', IGDA Business Committee, www.igda,org/biz

Ivancevich and Glueck, (1983), 'Study guide and applications manual to accompany foundations of personnel', (Ed.) Wentroff, Dorothy A, Business Publications, 1983

Jac Fitz-cnz, (1993), 'How to make benchmarking work for you', HR Magazine, www.bnet.com

Jack Dolmat — Connell, (1999), 'Developing a Reward Strategy That Delivers Shareholder and Employee Value', Compensation and Benefits Review, March-April 1999

Jack Halloram (1978), 'Applied Human Relations: An organizational approach', Prentice Hall of India, New Delhi, 1978

James, H. Harrington and James S.Harington (1996) 'High Performance Benchmarking - 20 steps to success', McGraw Hill, 1996

Jeannette Swist, (2002), `Benchmarking in Human Resources', SHRM White Paper, www.shrm.org

Jeffrey A Mello, (2007), 'Strategic Human Resource Management' Second Edition,

South-Western, Thomson Learning., Inc., Haryana, India, 2007

Jeffrey A. Mello, (2007), 'Strategic Human Resource Management', Second Edition, Thomson-South-Western, 2007

Jeffrey Daum, (1975), 'Internal promotion — psychological asset or debit? A study of the effects of leader origin', Organizational Behaviour and Study and Human Performance, 1975

Jeffrey Pfeffer, (1998), 'Six Dangerous Myths About Pay', Harvard Business Review, May-June 1998

John Anton and David Gusten (2000), 'Call Centre Benchmarking: How Good is Good Enough', Ichor Business Books, Perdue University Press, 2000

John Bratton and Jeffery Gold, (2003), 'Human Resource Management', Palgrave, 2003

John Brlimam (1987), 'Manpower Planning', Personnel Management Handbook, Ed. Sally Harper, Gower, Hampshire, England, 1987.

John G. Fisher, 1996, 'How to improve performance through benchmarking', Kogan and Page, 1996

John Lawrie, (1987), 'Skill inventories: Pack for the future', Personnel Journal, March 1987

John Steinbrink, (1978) 'How to Pay Your Sales Force', Harvard Busines.; I<eview 57, July-August 1978

John Tallitsch and John Moynahan, (1994), 'Fine -Tuning Sales Compensation Programs', Compensation and Benefits Review 26, No.2, March-April 1994

Karnataka Power Corporation Limited, (1999), 'National Conference on Best Practices in Power Generation' - conference papers, KPC1, Bangalore, India, 1999.

Karnikeya B, (2004), 'Understanding the Success Factors for Independent Restaurants in the Delhi/Gurgaon Region. An analysis of the gap between Management Perceptions and Customer Expectations', Journal of Services Research, 4(2), October-March 2004

Kath Morrish, (1994) 'Navigating Human Resource Benchmarking: A guide for Human Resource Managers', Workforce Management and Development Office, 1994 Keep. E., (1989), 'Corporate training strategies: The vital component', J.Storey (Ed.), New Perspectives in Human Resource Management, Routeledge, London, 1989

Kennedy, J. and Reid, M., (1994), 'Training Interventions', Fourth Edition, Institute of Personnel and Development, London, 1994

Kennedy, Van .Dusen, (1966), 'Unions, Employees and Government', Manaktalas, Bombay, India 1966.

Kleangartner, A and C.S.Anderson, (1987), 'Human Resource Managemnet in High Technology Firms', Lexington; Lexington Books, 1987

Kothari, C.R. (1990), 'Research Methodology: Methods and Techniques', ii Edition, Wishwa Prakashan, New Delhi, India, 1990

Koy P, Hof RD. and Arndt, M., (2003), 'Jobs: The turning point is here', Business Week, 2003, October, 27

Lado, Augustine A and Mary C. Wilson, (1994), 'Human resource systems and sustained competitive advantage: A competency-based perspective', Academy ofManagement Review, 19(4), 1994

Ledvinka, 'Federal Regulation' in Human Resource Management, Gary Dessler, 2004 Linda Stroh, Jeanne Brett, Joseph Baumann and Anne Reilly, (1996), 'Agency Theory and Variable Pay Compensation Strategies', Academy of Management Journal, 39, No.3, 1996 NiacDuffie, J.P. and T.A.Kochan, (1991), 'Does the US Underinvest in Training? Determinations of training in the world economics', Miami: Academy of Management, 1991

Malcolm, 1, (1996), The Value of benchmarking management reporting', Management Accounting, U.K., 74(6). 1996

Mamoria C.B. and S.V.Gankar, (2008), Personnel Management: Text and Cases', 28th Edition, Himalaya Publishing House, Mumbai, India, (2008)

Mark Meltzer and Howard Goldsmith, (1997), 'Executive Compensation for Growth Companies', Compensation and Benefits Review, November-December 1997

Martocchio, Joseph J, (2004), 'Strategic Compensation — A Human Resource Management Approach', Prentice Hall, 2004

Maybey, Christopher and Salaman Graeme, (1995), 'Strategic Human Resource Management', Blackwell Business, Oxford, 1995

McArdley, (1999), 'Training Design and Delivery', ASTD Press, Alexandria, Virginia, U.S., 1999

McConnel B, (2002), 'Recruiting how-tos as important as who-tos, SHRM Survey Reveals', HR News, December 2002

Mercy Mathew, 'Case Studies on Business Environment', www.flipkart.com

Ministry of Economic Development, (2002), Firm Foundations 2002: A study of New Zealand Business Practices & Performance, Knuckey, S. & Johnston, H. (Ids),

Ministry for Economic Development, New Zealand, 2002

Mittle Steadt, Robert E Jr., (1992), Journal, National Productivity Review, 1992 (www.em.doe.gov)

Mohd. Zairi and Paul Leonard, (1994), 'Practical Benchmarking: The complete guide', Chapman & Hall, 1994

Mohd. Zairi, (1998), 'Effective Management of Benchmarking Projects: Practical guidelines and examples of best practice', Butterworth Heinemann, 1998

Morgan, (1996), 'Benchmarking is not an instant hit: Purchasing', 120(8), pp. 42-4, 1996

Naidu, B.S.K. (2003), 'Training and HRD in Power Sector', NPTI, www.shilpabichitra.com

Nilakant, V and S. Ramnarayan, (1998), 'Managing Organisational Change', Sage Publications, New Delhi, India, 1998

Nina Munk., (1998), 'Organization Man', Fortune, March 16, 1998

Nitin Vazirani, `Benchmarking of HR Practices in Select Pharmaceutical Companies', Working Paper Series, SIES College of Management Studies, Nerul, WWW .siescoms.edu

O'Dell C, (1993), 'Building on received wisdom', Healthcare Forum Journal, January/February, 1993

Orissa State Electricity Board, (2001), 'FIR Issues in Private Participation in Infrastructure: A Case Study of Orissa Power Reform's', OSEB, Orissa, July 2003

Patra, K. (2003), 'Training and Development in Smaller Organizations', Indian Journal of Training and Development, XXXIII (3-4), Indian Society of Training and Development, July-December 2003

Paul Piors, Charles Meyers, and F.P.Maim, (1969), 'Management of Human Resources', McGraw Hall, New York, 1969

Peter F. Drucker, (1974), 'Management, Task, Responsibilities and Practices', 1974 Peter J.Dowling, Denice E Welch, Randall S. Schuler, (2001), 'International Human Resource Management: Managing People in a Multinational Context', Third _Edition, South-Western Thomson Learning, 2001 Pfeffer, J, (1984), 'Competitive advantage through people', California Management Review, Winter, 1984 Philip R.Harris, The New Work Culture, 1998

Planning Commission, Government of India, (2006), 'Integrated Energy Policy: Report of the Expert Committee', August 2006 Poole, Michael and Glenville Jenkins, (1996),

'Competitiveness and human resource management policies', Journal of General Management, 22(2), 1996 Price Waterhouse Coopers, (2003), Barometer Surveys: Fast-Growth Companies That Benchmark Grow Faster, Are More Productive Than Their Peers, PWC, 2003 Quality Network Inc., (1995), Seminar Material, 1995 R.G.Romell and R. Newsom, (1981), 'Self Directed Learning in HRD', Training and Development Journal, 1981 R.Katerberg and G.S.Balu, 1983 'An examination of level and OB' Stephen Robins, second item Redman N, (1993), `Benchmarking to support a vision', Proceedings of Benchmarking for Strategic Advantage Conference,' ICM Marketing Ltd, London, 1993 Reed, R and R.DeFillipp, I, (1990), 'Casual ambiguity, barriers to imitation, and sustainable competitive advantage', Academy of Management Review, 15(3) 1990

Rekha Balu, (2000), 'Bonuses Aren't just for the Bosses', Fast Company, December 2000

Richard Keegan and Eddie O'Kelly (2006) — 'Applied Benchmarking for competitiveness: A guide for owners and managers', D.G Enterprise, European Commission, 2006 Robert Gibbson, (1981), 'Compensation', AMACOM, New York, 1981 Robert, C.Camp, (1995), 'Business Process Benchmarking: Finding and implementing best practices', Vision Books, New Delhi, India 1995 Rogers, Dale S, (1995), Journal ofBusiness Logistics, www.bnet.com

Rumelt, R.P, (1987), 'Theory, strategy and entrepreneurship', D.J.Teece (Ed.), The Competitive Challenge, Cambridge, Massachusetts: Ballinger, 1987 Salopek, J.J. (1998), 'Workstation Meets Playstation', Training and Development, American Society for Training and Development, August 1998

Samuel Bookhart, (1991), `Benchmarking, A powerful Management Tool', a speech made at the "Benchmarking Against The Best" conference sponsored by the International Research Institute, June 13, 1991

Senge, Peter M, et al, (1990), 'The Fifth Discipline Fieldbook', New York, 1990 Sherry Sullivan, William Carden and David Martin, 'Careers in the Next Millennium: Directions for Future Research', Human Resource Management Review 8, No.2, (1998)

Shubhra Puri, (2008), 'State of the Sector: Reforms lead to gradual change' article, PowerLine, India's First Power Magazine, Volume 13 (1), September 2008

Singh A.J. and Perdue J. (2002), 'Preferred Training Methods for Specific Objectives: Survey of Managers in Private Clubs', Indian Journal of Training and Development, XXXII(1), Indian Society of Training and Development, January-March 2002

Snell, S.A and J.W.Dean Jr., (1992), 'Integrated manufacturing and human resource management: A human capital perspective', Academy of Management Journal, 35(3), 1992

Sparrow, P, R.S.Schuler and S.E.Jackson, (1994), 'Convergence or divergence: Human resource practices and policies for competitive advantage worldwide', The International Journal of Human Resource Management, 5(2), 1994

Srinivas R Kandula, (2007), 'Strategic Human Resource Development', Grower Publications, India, 2007

Stephen P Robbins, 1993, Organizational Behaviour, 1993 (book) Strayer, J. (Compiler), (2003), 'Instructional Systems Design Revisited — A Compendium of Performance Improvement Articles', ISPI, Massachusetts, U.S., 2003

Streets, R.M. and L.W.Porter, (1975), 'Motivation and Work Behaviour', 1975 Swain, A.K.P.C, (2008), 'A text book of Research Methodology', 2nd Revised Edition, Kalyani Publishers, Ludhiana, India, 2008

Tannenbaum, S. and G.Yukl, (1992), 'Training and development in work organization", in M.R.Rosenzweig and L.W.Porter (Eds.), Annual Review of Psychology, 43(1), 1992

The Bureau of National Affairs, Inc., (1991) 'Non-Traditional Incentive Pay Programs', Personnel Policies Forum Survey 148, May 1991

Thomas H.Stone, 1989, 'Understanding Personnel Management', CBS college Publishing, 1989

Thomas Patten Jr., (1977), 'Pay: Employee Compensation and Incentive Plans', Free Press, New York, 1977.

Thomas Robertson, (1986), 'Fundamental Strategies for Wage and Salary Administration', Personnel Journal, 65, No.11, November 1986

Tiehy, N., C.J. Fonibrun, and M.A.DeVanna, (1982), 'Strategic human resource management', Sloan Management Review, 22(2), 1982

Tony Newby, (1998), Encyclopedia of Practical Management Training, Volume 15, Crest Publishing House, Kogan Page (London)/ (India), New Delhi, India, 1998

Towers, B., (2004), 'The Handbook of Human Resource Management', Second Edition, Blackwell Business, Oxford, 2004

Ulrich, D and D.Lake, (1990), 'Organizational Capability', John Wiley & Sons, New York, 1990

UNDP, (2004) and IEA, (2004), Integrated Energy Policy, Government of India publication, 2004.

UNESCO, Unlocking the Human Potential for Public Sector Performance, World Public Sector Report, 2005

UPES Centre for Continuing Education

QUESTIONNAIRE

A CRITICAL STUDY OF EMPLOYEE RETENTION MANAGEMENT IN THE OIL AND GAS SECTOR WITH SPECIFIC REFERENCE TO GULF REGION

Name of Organisation: -

Name & Contact No (Optional)-: -

Designation / Year of Experience:-

Section A- Manpower Planning						
Sr. No.	Question	SD A	DA	UD	Agree	SA
1.	Manpower planning is important process in your organization	O	O	O	O	O
2.	In manpower planning, industry comparison (best practice) is made	O	O	O	O	O
3.	In manpower planning, comparison (best practice) with industry abroad is made	O	O	O	O	O
4.	Manpower planning is made in consultation with all departments in the organization	O	O	O	O	O
5.	Workload (job content) is assessed based on scientific methods	O	O	O	O	O
6.	Qualification and skill sets of employees are clearly defined.	O	O	O	O	O
7.	Staff is adequate	O	O	O	O	O
8.	Staff is excess	O	O	O	O	O
9.	There is shortage of staff	O	O	O	O	O
10.	Employees with right skills are available	O	O	O	O	O
11.	Employees are deployed on right job	O	O	O	O	O
12.	Deployment of outsource employees is in planning	O	O	O	O	O
13.	Outsourcing is a good practice	O	O	O	O	O
14.	Your workload is challenging but not burdensome	O	O	O	O	O
Section B - Recuitment & Selection						
Sr. No.	Question	SD A	DA	UD	Agree	SA
15.	Method of recruitment adopted is proper	O	O	O	O	O
16.	External (open market) recruitment is largely resorted to	O	O	O	O	O

17.	Internal recruitment (from within) is encouraged	○	○	○	○	○
18.	Job vacancies are advertised extensively	○	○	○	○	○
19.	Fair opportunity is provided to all eligible candidates	○	○	○	○	○
20.	GATE Score is a Criterion for Selection	○	○	○	○	○
21.	Selection process (written test, interview, group discussion) is subjective	○	○	○	○	○
22.	Induction training programme is in Practice	○	○	○	○	○

Section C – Career Planning & Growth						
Sr. No.	Question	SD A	DA	UD	Agree	SA
23.	Your job makes the best use of your abilities	○	○	○	○	○
24.	The targets are set fairly	○	○	○	○	○
25.	Job rotation is followed	○	○	○	○	○
26.	Robust annual appraisal system exists in organization.	○	○	○	○	○
27.	Promotion opportunity available is fair	○	○	○	○	○
28.	Career growth scheme is favourable to employees	○	○	○	○	○
29.	Career growth is based on seniority and hence effective	○	○	○	○	○
30.	Career growth is based on seniority up to middle level and by merit for higher levels and hence effective	○	○	○	○	○
31.	360 degree feedback system is being followed	○	○	○	○	○
32.	There is recognition for exceptional performance	○	○	○	○	○
33.	People lacking competence in doing their jobs are helped to acquire competence rather than being left unattended	○	○	○	○	○
Section D- Employee Engagement						
Sr. No.	Question	SD A	DA	UD	Agree	SA
34.	Employees Engagement Surveys are being done in the Organization	○	○	○	○	○
35.	Employees are motivated	○	○	○	○	○
36.	Sense of belongingness is visible	○	○	○	○	○
37.	The organization is a good place to work	○	○	○	○	○
38.	The grievances are handled fairly	○	○	○	○	○
39.	Employees are satisfied with the appraisal system being followed in the organization.	○	○	○	○	○
40.	Oil & Gas sector is undergoing structural change. Separate entities are formed by "Unbundling the Business Sectors". New "Methods and Performance Measures" are sought to be implemented. Employees are prepared to "Cope with the Change".	○	○	○	○	○
Section E- Training & Development (Focus To Non- Executive Employees)						
Sr. No.	Question	SD A	DA	UD	Agree	SA
41.	There is good "training policy" in the organization for Non-executives / Staff	○	○	○	○	○
42.	There is well equipped dedicated training institute for imparting training to Non-executives / Staff	○	○	○	○	○
43.	Training needs are assessed systematically for Non-executives / Staff	○	○	○	○	○
44.	Induction training programme is in Practice for Non-executives / Staff	○	○	○	○	○

45.	Department head are consulted on training needs for Non-executives / Staff	○	○	○	○	○
46.	New technology requirements are considered during TNA for Non-executives / Staff	○	○	○	○	○
47.	Non-executives / Staff 's views on training requirements are considered	○	○	○	○	○
48.	In-house training is regular feature for Non-executives / Staff	○	○	○	○	○
49.	Annual training calendar is prepared and notified in advance for Non-executives / Staff	○	○	○	○	○
50.	Training covers skill & Knowledge development for Non-executives / Staff	○	○	○	○	○
51.	Behavioural Trainings are being imparted for attitudinal change of Non-executives / Staff	○	○	○	○	○
52.	There is adequate participation in In-house training programme for Non-executives / Staff	○	○	○	○	○
53.	In-house training programmes are useful for Non-executives / Staff	○	○	○	○	○
54.	Non-executives / Staff s are sent for external training	○	○	○	○	○
55.	External training programmes are relevant and useful for Non-executives / Staff	○	○	○	○	○
56.	Impact of training on performance is assessed for Non-executives / Staff	○	○	○	○	○
57.	Your organization has tie-up with external training institutions for long term specific/organization related programmes for Non-executives / Staff	○	○	○	○	○
58.	Such long term training programmes are relevant and useful for Non-executives / Staff	○	○	○	○	○
59.	Upon successful completion of such long term training programmes, employees are given financial benefits/promotion for Non-executives / Staff	○	○	○	○	○