CHAPTER - III

OCCUPATIONAL STRESS MANAGEMENT IN IT INDUSTRIES

3.1 IT INDUSTRY IN INDIA

The Information Technology industry in India has gained a brand identity as a knowledge economy due to its IT and ITES sector. The IT–ITES industry has two major components: IT Services and business process outsourcing (BPO). The growth in the service sector in India has been led by the IT–ITES sector, contributing substantially to increase in GDP, employment, and exports. The sector has increased its contribution to India's GDP from 6.1% in 2009-10 to 6.4% in 2010-11. According to NASSCOM, the IT–BPO sector in India aggregated revenues of US$88.1 billion in financial year 2011. The top seven cities that account for about 90% of these sectors’ exports are Bangalore, Chennai, Hyderabad, Mumbai, Pune, Delhi, Kolkata, Coimbatore and Kochi. Export dominate the IT–ITES industry, and constitute about 77% of the total industry revenue. Though the IT–ITES sector is export driven, the domestic market is also significant with a robust revenue growth.

This sector has also led to employment generation. Direct employment in the IT services and BPO/ITES segment was 2.3 million in 2009-10 and is estimated to reach nearly 2.5 million by the end of financial year 2010-11. Indirect employment of over 8.3 million job opportunities is also expected to be generated due to the growth of this sector in 2010-11. Generally dominant player in the global outsourcing sector, however, the
sector continues to face challenges of competitiveness in the globalized world, particularly from countries like China and Philippines.

India's growing stature in the Information Age enabled it to form close ties with both the United States of America and the European Union. However, the recent global financial crises has deeply impacted the Indian IT companies as well as global companies. As a result hiring has dropped sharply, and employees are looking at different sectors like the financial service, telecommunications, and manufacturing industries, which have been growing phenomenally over the last few years.

India's IT Services industry was born in Mumbai in 1967 with the establishment of Tata Group in partnership with Burroughs. The first software export zone SEEPZ was set up here way back in 1973, the old avatar of the modern day IT park. More than 80 percent of the country's software exports happened out of SEEPZ, Mumbai in 80s.

3.2 HISTORY

The Indian Government acquired the EVS EM computers from the Soviet Union, which were used in large companies and research laboratories. In 1968 Tata Consultancy Services established in SEEPZ, Mumbai by the Tata Group were the country's largest software producers during the 1960s. As an outcome of the various policies of Jawaharlal Nehru (office: 15 August 1947 – 27 May 1964) the economically beleaguered country was able to build a large scientific workforce, third in numbers only to that of the United States of America and the Soviet Union. On 18 August 1951 the minister of education Maulana Abul Kalam Azad, inaugurated the Indian Institute of Technology at Kharagpur in West Bengal. Possibly modeled after the Massachusetts Institute of Technology these institutions were conceived
by a 22 member committee of scholars and entrepreneurs under the chairmanship of N. R. Sarkar.

Relaxed immigration laws in the United States of America (1965) attracted a number of skilled Indian professionals aiming for research. By 1960 as many as 10,000 Indians were estimated to have settled in the US. By the 1980s a number of engineers from India were seeking employment in other countries. In response, the Indian companies realigned wages to retain their experienced staff.

The National Informatic Centre was established in March 1975. The inception of The Computer Maintenance Company (CMC) followed in October 1976. During 1977-1980 the country's Information Technology companies Tata Infotech, Patni Computer System and Wipro had become visible. The 'microchip revolution' of the 1980s had convinced both Indira Gandhi and her successor Rajiv Gandhi that electronics and telecommunications were vital to India's growth and development. MTNL underwent technological improvements. During 1986-1987, the Indian government embarked upon the creation of three wide-area computer networking schemes: INDONET (intended to serve the IBM mainframes in India), NICNET (the network for India's National Informatics Centre), and the academic research oriented Education and Research Network (ERNET).

### 3.3 POST LIBERALIZATION

Videsh Sanchar Nigam Limited (VSNL) introduced Gateway Electronic Mail Service in 1991, the 64 kbit/s leased line service in 1992, and commercial Internet access on a visible scale in 1992. Election results were displayed via National Informatics Centre's NICNET.
The Indian economy underwent economic reforms in 1991, leading to a new era of globalization and international economic integration. Economic growth of over 6% annually was seen during 1993-2002. The economic reforms were driven in part by the significant internet usage in the country. The new administration under Atal Bihari Vajpayee which placed the development of Information Technology among its top five priorities—formed the Indian National Task Force on Information Technology and Software Development.


Throughout the 1990s, another wave of Indian professionals entered the United States. The number of Indian Americans reached 1.7 million by 2000. This immigration consisted largely of highly educated technologically proficient workers. Within the United States, Indians fared well in science, engineering, and management. Graduates from the Indian Institutes of Technology (IIT) and Indian Institute of Information Technology-Allahabad (IIIT-A) became known for their technical skills. Thus GOI planned to establish new Institutes especially for Information Technology to enhance this field. In 1998 India got the first IT institute named Indian Institute of Information Technology at Allahabad. The success of Information Technology in India not only had economic repercussions but also had far-reaching political consequences. India's reputation both as a source and a destination for skilled workforce helped it improve its relations with a number of world economies.
The relationship between economy and technology valued in the western world facilitated the growth of an entrepreneurial class of immigrant Indians, which further helped in promoting technology-driven growth.

### 3.4 RECENT DEVELOPMENT

The economic effect of the technologically inclined services sector in India accounting for 40 per cent of the country's GDP and 30 per cent of export earnings as of 2006. Today, Bangalore is known as the Silicon Valley of India and contributes 33% of Indian IT Exports. India's second and third largest software companies are head-quartered in Bangalore.

Mumbai too has its share of IT companies that are India's first and largest, like TCS and well established like Reliance, Patni, L&T Infotech, i-Flex, WNS, Shine, Naukri, Jobspert etc. are head-quartered in Mumbai. And these IT and dot com companies are ruling the roost of Mumbai's relatively high octane industry of Information Technology.

Such is the growth in investment and outsourcing, it was revealed that Cap Gemini will soon have more staff in India than it does in its home market of France with 21,000 personnel+ in India. On 25 June 2002 India and the European Union agreed to bilateral cooperation in the field of science and technology. A joint EU-India group of scholars was formed on 23 November 2001 to further promote joint research and development. India holds observer status at CERN while a joint India-EU Software Education and Development Center is due at Bangalore. The India’s IT industry (in USD billion) during the period 2004 to 2008 is shown in table 3.1.
### TABLE 3.1

**INDIA’S IT INDUSTRY (IN USD BILLION)**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Services</td>
<td>10.4</td>
<td>13.5</td>
<td>17.8</td>
<td>23.5</td>
<td>31.0</td>
</tr>
<tr>
<td>- Exports</td>
<td>7.3</td>
<td>10.0</td>
<td>13.13</td>
<td>18.0</td>
<td>23.1</td>
</tr>
<tr>
<td>- Domestic</td>
<td>3.1</td>
<td>3.5</td>
<td>4.5</td>
<td>5.5</td>
<td>7.9</td>
</tr>
<tr>
<td>ITES-BPO</td>
<td>3.4</td>
<td>5.2</td>
<td>7.2</td>
<td>9.5</td>
<td>12.5</td>
</tr>
<tr>
<td>- Exports</td>
<td>3.1</td>
<td>4.6</td>
<td>6.3</td>
<td>8.4</td>
<td>10.9</td>
</tr>
<tr>
<td>- Domestic</td>
<td>0.3</td>
<td>0.6</td>
<td>0.9</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Engineering services, R&amp;D and Software products</td>
<td>2.9</td>
<td>3.9</td>
<td>5.3</td>
<td>6.5</td>
<td>8.6</td>
</tr>
<tr>
<td>- Exports</td>
<td>2.5</td>
<td>3.1</td>
<td>4.0</td>
<td>4.9</td>
<td>6.4</td>
</tr>
<tr>
<td>- Domestic</td>
<td>0.4</td>
<td>0.7</td>
<td>1.3</td>
<td>1.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Hardware</td>
<td>5.0</td>
<td>5.9</td>
<td>7.0</td>
<td>8.5</td>
<td>12.0</td>
</tr>
<tr>
<td>- Exports</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>- Domestic</td>
<td>4.4</td>
<td>5.1</td>
<td>6.5</td>
<td>8.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Total IT industry (including hardware)</td>
<td>21.6</td>
<td>28.4</td>
<td>37.4</td>
<td>48.0</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Source: Wikipedia, the free encyclopedia

It is clearly seen from the table 3.1 India’s IT industry (in USD billion) was stood at 21.6 USD billion in the year 2007, it was increased to 64 USD billion in the year 2011, the increases being approximately 296 per cent, with CAGR of 24.26 per cent.
3.5 MAJOR IT HUBS IN INDIA

The major IT hubs in India are shown in Table 3.2

**TABLE 3.2**

MAJOR IT HUBS IN INDIA

<table>
<thead>
<tr>
<th>Ranking</th>
<th>City</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangalore</td>
<td>Popularly known as the capital of the Silicon Valley of India is currently leading in Information Technology Industries in India.</td>
</tr>
<tr>
<td>2</td>
<td>Chennai</td>
<td>It is the Second largest exporter of Software next to Bangalore. It has the largest operations for India's top software company TCS, Infosys (has world's largest development center with 25,000 employers in Mahindra world city at Baranur near Chengalpattu, and many centers in IT corridor), and other software companies like Wipro, CTS, Patni, L&amp;T infotech and many companies have major operations in IT corridor, Ambattur and other places in Chennai</td>
</tr>
<tr>
<td>3</td>
<td>Hyderabad</td>
<td>Hyderabad called as Cyberabad, which has good Infrastructure and good government support is also a good technology base in India. The Government of Andhra Pradesh has built a separate township for IT Industry called the HITEC City</td>
</tr>
<tr>
<td>4</td>
<td>Pune</td>
<td>Pune, a major industrial point in India.</td>
</tr>
<tr>
<td>5</td>
<td>Coimbatore</td>
<td>It is the Manchester of South India, second largest city in the state of Tamil Nadu, India and one of the largest industrial city in India. Among major metro-markets Coimbatore (up 38%) MAY 11 (Bangalore showed the slowest rate of annual growth at 4 percent driven by reduced demand in the BPO/ITES sector), It Become an Upcoming Major IT hub of India</td>
</tr>
<tr>
<td>Ranking</td>
<td>City</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>NCR</td>
<td>The National Capital Region of India comprising Delhi, Gurgaon, Faridabad, Noida, Greater Noida and Ghaziabad are having ambitious projects and are trying to do every possible thing for this purpose.</td>
</tr>
<tr>
<td>7</td>
<td>Mumbai</td>
<td>Popularly known as the commercial, entertainment, financial capital of India, This is one city that has seen tremendous growth in IT and BPO industry, it recorded 63% growth in 2008. TCS, Patni, L&amp;T Infotech, I-Flex WNS and other companies are headquartered here.</td>
</tr>
<tr>
<td>8</td>
<td>Kolkata</td>
<td>Kolkata is a major IT hub in eastern India. All major IT companies are present here. The city has tremendous potential for growth in this sector with upcoming areas like Rajarhat.</td>
</tr>
<tr>
<td>9</td>
<td>Trivandrum</td>
<td>Trivandrum is the capital of Kerala. Government of Kerala provides a good platform for IT development in the city with India's largest IT park Technopark and dedicated Technocity SEZs.</td>
</tr>
<tr>
<td>10</td>
<td>Kochi</td>
<td>Kochi is the commercial capital of Kerala and is well connected by train, bus, sea, and air. Infopark and smartcity are the two SEZ IT parks with more than 100 companies.</td>
</tr>
</tbody>
</table>

### 3.6 IT INDUSTRY IN CHENNAI

In the diversified economic foundation, software service has gained a major ground in the Chennai's economy. The late 1990s, witnessed the birth of business process outsourcing and software development and within few years there was a prominent squirt of outgrowth in the number and magnitude of the software industries in the city.
This in turn created a great impact on the city's economy. Chennai is now one of the important software center of India. Cheap IT labor is one of the main fact that has attracted multitude of multi-billion-rupee foreign software companies such as Microsoft to establish their business in the city as well as in other software centers of India like Bangalore, Hyderabad, Kolkata, and Delhi making the country a booming software exporter worldwide.

Major software companies in Chennai are like Cognizant Technology Solutions, Accenture, CSC, Satyam, EDS, HP, HCL, Infosys, IBM, Sun Microsystems, Symantec, Verizon TCS and Wipro. At present Chennai is the second largest exporter of IT and IT enabled Services in India next to the Silicon Valley. The city is a hub of a number of technological park and promises the employment of nearly 3,00,000 people.

3.7 PROFILE OF THE STUDY UNITS

A brief profile of the selected IT companies is described below;

3.7.1 TATA CONSULTANCY SERVICES

Tata Consultancy Services Limited (TCS) is a global IT services, business solutions and outsourcing company headquartered in Mumbai, India and a subsidiary of the Tata Group conglomerate. It is the second-largest India-based provider of business process outsourcing services. TCS has been ranked 20 in the list of top companies of India, by Fortune India 500 magazine. It is the largest technology service company in India by revenue and market capitalization. TCS has 142 offices across over 47 countries and generates around 30 per cent of India's IT exports. One of TCS' first assignments was to provide punched card services to a sister concern, Tata Steel (then TISCO). It later bagged the country's first software project, the Inter-Branch Reconciliation System (IBRS) for the Central Bank of India.
It also provided bureau services to Unit Trust of India, thus becoming one of the first companies to offer BPO services.

TCS is one of the largest private sector employers in India with a core strength 226,751 individuals. TCS has turned into the second-largest employer among listed companies after Coal India Limited. But the biggest employer in the country is Indian Railways with 16 lakhs employees. TCS's BPO arm had revenues of $925 million in the year that ended in March 2011, and has 34,000 employees. TCS has one of the lowest attrition rates in the Indian IT industry.

As a brand, TCS is the 76th Most Trusted Brand according to The Brand Trust Report, 2011. TCS has been ranked as the world's 7th greenest company in Newsweek's Green Rankings 2011. In addition, TCS is the highest ranked Asia-based company and second highest ranked globally in the Information Technology & Services company category.

3.7.2 INFOSYS LIMITED

Infosys Limited formally Infosys Technologies is an Indian global technology services company headquartered in Bangalore, India. Infosys is ranked 27 in the list of top companies of India in Fortune India 500 list in 2011. It has offices in 29 countries and development centers in India, US, China, Australia, UK, Canada, Japan and many other countries. Infosys had 1,45,088 employees of 85 nationalities as on December 31, 2011. Infosys provides business consulting, technology, engineering and outsourcing.

Infosys delivers IT-enabled business solutions to enable Global 2000 companies to build their enterprises of tomorrow. Infosys ranked among the most innovative companies in a Forbes survey, leading technology companies in a report by The Boston Consulting Group and top ten green companies in Newsweek's Green Rankings. Infosys was voted India's most admired
company in The Wall Street Journal Asia 200 every year since 2000. The corporate governance practices were recognized by The Asset Platinum award and the IR Global Rankings.

In 2001, it was rated by Business Today. Infosys was rated best employer to work for in 2000, 2001, and 2002 by Hewitt Associates. In 2007, Infosys received over 1.3 million applications and hired fewer than 3% of applicants. Infosys won the Global MAKE (Most Admired Knowledge Enterprises) award for the years 2003, 2004 and 2005, and is inducted into the Global Hall of Fame for the same. Infosys was also ranked as the 15th most trusted brand in India by The Brand Trust Report in 2011.

3.7.3 WIPRO TECHNOLOGIES LTD.

Wipro Limited (formerly Western India Products Limited (Amalner)) is an Indian global IT services and consulting company headquartered in Bangalore, India. As of 2012, Wipro is the second largest IT services company by turnover in India, employing about 120,000 people worldwide as of December 2011. It provides outsourced research and development, infrastructure outsourcing, business process outsourcing (BPO) and business consulting services. The company operates in three segments: IT Services, IT Products, Consumer Care and Lighting. It is 9th most valuable brand in India according to an annual survey conducted by Brand Finance and The Economic Times in 2010.

Wipro BPO employs over 22,000, of whom 3,150 are at its Hyderabad campus. The planned new recruitments will be from among science and commerce graduates and under-graduates. The majority of Wipro BPO’s business comes from the US, followed by Europe. The rest of the world contributes only marginally to its top line.
Founded in 2002, Wipro BPO has operations in Delhi, Pune, Kolkata, Chennai, Mumbai, Hyderabad, Navi-Mumbai (Belapur) Greater Noida, Mysore and Kochi in India. It also has offices in Shanghai and Cebu in Asia and Curitiba in Brazil and Wroclaw in Poland. It has 44 clients in segments such as banking & capital markets, insurance, travel & hospitality, hi-tech manufacturing, telecom and healthcare.

3.7.4 COGNIZANT TECHNOLOGY SOLUTIONS INDIA PVT. LTD.

Cognizant Technology Solutions India Private Limited offers software development, integration, and maintenance services for various companies. Cognizant Technology Solutions India Private Limited was formerly known as Dun & Bradstreet Satyam Software. The company was founded in 1994 and is based in Chennai, India. Cognizant Technology Solutions India Private Limited operates as a subsidiary of Cognizant Technology Solutions Corp.

Cognizant Technology Solutions India Private Limited has announced a joint development program with Microsoft Corporation (India) Pvt. Ltd. to deliver cloud enabled solutions to enterprise customers. As part of this program, Cognizant has set up a state-of-the-art "Octane Solution Center" at its facility in Bangalore to accelerate development of cloud-enabled next-generation solutions that integrate Cognizant business services and Microsoft technologies.

3.7.5 HCL TECHNOLOGIES LTD

HCL Technologies Limited is a global IT services company headquartered in Noida India. It is primarily engaged in providing a range of outsourcing services, business process outsourcing and infrastructure services.
HCL Technologies is fourth largest IT company in India and is ranked 48 in the global list of IT services providers.

HCL Technologies is one of the two businesses – both of them separately listed in India – falling under the corporate umbrella of HCL Enterprise with combined annual 2011 revenues of US$ 6 billion. HCL Enterprise was founded in 1976 and is one of India's original IT garage start ups.

HCL Technologies formed in 1991 when HCL's R&D business was spun off to focus on the growing IT services industry. They have decided to vast their features in Information Technology all over the world. During last 20 years, HCL has expanded its service portfolio in IT applications (custom applications for industry solutions and package implementation), IT infrastructure management, and business process outsourcing, while maintaining and extending in product engineering.

3.7.6 L&T INFOTECH

Larsen & Toubro Infotech Ltd. (L&T Infotech), one of the fastest growing IT Services companies, is ranked 10th by NASSCOM among the top (Indian) software and services exporters from India in 2010. A wholly owned subsidiary of the $12 billion Larsen & Toubro, India's Best Managed Company (as per the survey conducted by Business Standard in 2010), L&T Infotech is differentiated by its unique Business-to-IT Connect.

Originally founded as L&T Information Technology Ltd, a wholly owned subsidiary of Shauvik and Money Ltd (L&T), the company changed its name to S&M Infotech. In December 2006, L&T Infotech acquired GDA Technologies privately held electronic design firm based in California, USA and all of its design centers in USA and India.
L&T Infotech has its presence globally across the following regions: India-Mumbai (Powai), Navimumbai (Vashi,Airoli), Pune (Shivaji agar,Hinjewadi), Bengaluru (Whitefield), Mysore (Hebbal), Chennai (Manapakkam) USA, Canada, Europe, Asia Pacific, South Africa, Middle East and Australia & New Zealand.

3.7.7 MAHINDRA SATYAM

Mahindra Satyam formerly Satyam Computer Services, is an Indian IT services company based in Hyderabad, India. It was founded in 1987 by B Ramalinga Raju. Mahindra Satyam is a part of the Mahindra Group which is one of the top 10 industrial firms based in India. The company offers consulting and information technology (IT) services spanning various sectors. In June 2009, the company unveiled its new brand identity “Mahindra Satyam” subsequent to its takeover by the Mahindra Group’s IT arm, Tech Mahindra on 2009. It is ranked 5 in Indian IT companies and overall ranked 153 by Fortune India 500 in 2011.

Mahindra Satyam will acquire a minority stake of 15% for ₹35 crore in Dion Global Solutions Limited, the Delhi-based firm owned by billionaire brothers Malvinder Mohan Singh and Shivinder Mohan Singh, that provides solutions for capital markets globally. Mahindra Satyam acquired Delhi based BPO firm Customer's International operations for US $27 million. This is the first 100% acquisition by Mahindra Satyam since it became part of Mahindra Group.

3.7.8 TECH MAHINDRA LTD

Tech Mahindra Limited is an Indian provider of information technology (IT), networking technology solutions and business process outsourcing (BPO) services to the global telecommunications industry. Headquartered at Pune, India. It is a joint venture between the
Mahindra Group and BT Group plc, UK with M&M (Mahindra and Mahindra) holding 44% and BT holding 39% of the equity.

Tech Mahindra clocks revenues over USD 1 billion. Its activities spread across a broad spectrum, including Business Support Systems (BSS), Operations Support Systems (OSS), Network Design & Engineering, Next Generation Networks, Mobility Solutions, Security consulting and Testing. The "solutions portfolio" includes Consulting, Application Development & Management, Network Services, Solution Integration, Product Engineering, Infrastructure Managed Services, Remote Infrastructure Management and BSG (comprises BPO, Services and Consulting). Tech Mahindra is ranked 6 in India's software services firms behind Tata Consulty Services, Wipro, Infosys, and HCL Technologies and overall 161 in Fortune India 500 list for 2011. Tech Mahindra has implemented more than 15 Greenfield Operations globally and has over 128 active customer engagements mostly in the Telecom sector. The company has been involved in about 8 transformation programs of incumbent telecom operators. With an array of service offerings for TSPs, TEMs and ISVs, Tech Mahindra serves.

3.7.9 AEGIS LIMITED

AEGIS IT Solutions India Pvt. Ltd., is a professionally managed company providing software services and recruitment solutions since the 2008. Its objective is to develop strong client relations based on shared goals & common objectives. Currently the company are working with various IT / ITES clients for their requirements and their software needs. And it delivers quality support within the mentioned guidelines. The company are specialized in ERP products like SAP, Siebel and Peoplesoft and Oracle. Its mission is to create good partnerships with its clients, thereby it make its business to provide them with effective human resource and software solutions and to
assure its candidates a joyous working environment whilst maintaining the highest standards.

3.7.10 CSC, INDIA

Computer Sciences Corporation India Private Limited (CSC India) is a subsidiary of Computer Sciences Corporation operates as an information technology (IT) services company in India. CSC India started its operation in India in 1991. CSC India is located in seven cities in India including Noida, Indore, Hyderabad, Chennai, Mumbai, Bangalore and Vadodara. With more than 20,000 employees including 3,000 in other geographies that support CSC India operations, It is one of the Top 10 IT services firms in India and also CSC's second largest operations globally.

In India, CSC offers services across industry segments, including applications development and product support, infrastructure and BPO services. CSC in India houses the company’s first Office of Innovation outside the U.S.

3.8 CAUSES OF WORKPLACE STRESS IN IT INDUSTRY

By the advent of liberalization, privatization, globalization, India faces an economic reform and become the global attraction centre for various national and multinational companies. The service sector in India has seen a huge growth and still possesses immense potential to be tapped. This development process is not untouched with the cut throat competition culture in the market.

In order to maximize the market share, the companies generally fix a target level and reaching the target level becomes the root cause of survival. In order to give the best and making it before the competitors the workplace has now been observed to be occupied with the stress level. Every stress level
is determined by the position of the employee in the organization and his legitimate powers to transfer the part of stress level to his subordinates and staff members.

The human resource management practices help in throwing light on this contemporary subject. IT industry is one of the growing sectors of the day, the demand of IT professionals of India in the world is increased to such an extent that they get an handsome amount of packages with hectic, stressed full job targets, willingness to earn more in short span of time leads youth and expose to different health related issues and convert into psychological, psychosomatic and physiological disorders.

The IT industry has been one of India's most rapidly growing areas of new employment, but opportunities have also emerged in other service industries including fast food, fashion, advertising and design, courier services, hairdressing and cosmetics, etc., the boom in the Indian software industry has put the country on the global IT map.

The IT industry has revolutionized the Indian economy, creating considerable employment opportunities, generating wealth and significant foreign exchange, and driving massive social changes. Software-drive IT is today at the top of India's national agenda. It is an instrument and a model for the modernization of the Indian economy.

When IT industry first started gaining momentum in India starting from 1995-2000, everyone thought that IT industry is the best career option for Engineers and MBA's alike. Unfortunately, everyone started jumping in the IT bandwagon. From year 2000 to 2009, India saw a large number of new Engineering colleges popping up everywhere producing thousands (or lakhs) of new software engineers. Thanks to IT outsourcing, the demand for
engineers has been going up but the supply of eligible candidates has gone up even higher.

Most IT companies on the other hand now a days try to take maximum "juice" out of the candidate. Even though the official working hours are 8-9 hours per day, it is usually much more because of unrealistic deadlines set by managers. Additionally, many individuals work on weekends to meet those deadlines and make their managers happy for a better raise and job security.

Stress, depression and hypertension have now become extremely common among all outsourcing / IT industries (Software, ITeS and BPO). Stress can lead to many health problems like sleeping disorder, anger, headaches, diabetes, fatigue and obesity. This is gradually transforming into a major health concern in India and especially during the times of economic depression when job security is doubtful, these concerns increase drastically.

A study by the Associated Chambers of commerce and Industry of India (Assocham), said 54 per cent of the workforce in the IT and ITeS sectors were afflicted with depression, severe headaches, obesity, chronic backache, spondylosis, diabetes and hypertension.

Indian society is too much driven by financial status. Young people can expect a much better starting salary in IT than what their parents have achieved over the years working for government, sales or other traditional industrial sectors. People get a false pretense that they will be comfortably sitting in a cube, away from all the tensions and stress of day-today life. No one talks about the mental stress in IT Industry, which can be more damaging even than physical labour.
3.8.1 MAJOR SOURCES OF STRESS IN IT INDUSTRY

It is a well-established fact that specific conditions cause stress in an individual differ from one person to another. This is mainly due to the fact that a specific situation is perceived differently by different people. However, there are some specific situations that can cause workplace stress.

The workplace had become a high stress environment in many organizations cutting across industries. In IT industry, employees were experiencing high level of stress due to various factors. Some of the major sources of stresses in the IT industry are explained below;

3.8.1.1 Long working hours

The fear of loosing a job make employees want to work harder to be able to outperform their colleagues in the desire to impress the bosses. Long hours are not only physically tiring but can a high alert state throughout the day can drain employee’s mind completely.

Long working hours and odd hours is the greatest cause of stress for Indian IT industry. This is the major reasons for high rate of attrition in the industry. Long hours, in itself, is a combination of work load. In the industry workload is tremendous plus the time involved in traveling between home and office. The employees have to work for 11-12 hours per day-the number goes up to 14 in case of companies that encourage overtime.

3.8.1.2 Technology

Computers and mobile phones were developed to make life easier, faster and more convenient for man. However, with new technologies being launched each day there is a large pressure on workers to stay up-to-date with every new technology. Accompanied by this, the workload does not seem to
have reduced with the use of technologies. Instead the demands from humans keep increasing continuously.

3.8.1.3 Job insecurity

The competition in the market, economic conditions, mergers and acquisitions and better technologies are making resources redundant. In such a situation every employee is pushed towards saving his place irrespective of what it takes to do so. Back-biting, taking credit for where it is not due and other such unprofessional behavior breeds.

3.8.1.4 Discrimination

While not a global cause of workplace stress, discrimination is however extremely rampant in various offices. The discrimination could be on the basis of sex, race, religion or nationality. Any such discrimination makes the targeted employee feel extremely tense at work all the time.

3.8.1.5 Harassment

While the first thing that comes to mind is sexual harassment that is fairly rampant, especially in IT industries where large number of female employees are employed, other forms of physical harassment and mental torture have also been known to exist.

3.8.1.6 Economic factors

With the industrial and the information technology revolution, better productivity has become possible. This has resulted in investors putting pressure on the management to get better bottom line results. Higher competition, lack of worker unions and a hire-and-fire attitude has increases the fear of a job loss to an extent where even high performers do not consider themselves safe from a "pink slip".
Economic problems created by individuals overextending their financial resources are another set of personal troubles that can create stress for employees and distract their attention from their work.

3.8.1.7 **Personality type**

Personality characteristics such as authoritarianism, rigidly, masculinity, femininity, extraversion, supportiveness, spontaneity, emotionality, tolerance, locus of control, anxiety, and need for achievements are particularly relevant to individual stress.

3.8.1.8 **Work overload**

Too much work causes stress to an employee. Excess workload has become the norm these days as more and more organizations have reduced their work-force and restructured work, leaving the remaining employees with more tasks and fewer resources of time to complete them.

3.8.1.9 **Role conflict**

Role conflict occurs where people face competing demands. There are two types of role conflict in the organization. Interrole conflict occurs when an employee has two roles that are in conflict with each other. Personal conflict occurs when personal values clash with organizational goals.

3.8.1.10 **Role ambiguity**

Role ambiguity exists when employees are uncertain about their responsibilities, functions, performance expectations and levels of authority. This tends to occur when people enter new situations, such as joining the organization or taking foreign assignments, because they are uncertain about tasks and social expectations.
3.8.1.11 Task characteristics

Task characteristics are also individual–level stressors. Tasks are more stressful when they involve decision making, monitoring equipment or exchange information with others. Work during night shifts result in gastrointestinal disorders and abnormal heart rhythms.

These can be chronic gynecological problems for women. Mental symptoms can be so severe that a stressed nightshift worker can almost be unmanageable. The night shift worker will be more vulnerable to stress for sleeping patterns, emotional problems and family commitments while juggling a varying work time table, sometimes with little social support.

3.8.1.12 Technological change

In IT industry, professionals often plan advances in technology without seeking input and involvement from the people affected by the change. In addition to that innovation can make an employee’s skill and experience obsolete in a very short time, which are a threat to many people and cause them stress.

3.8.1.13 Sudden reorganization and unexpected changes in work schedules

Changes in the structure of the organization result in new work groups and changes in the way in which the individuals work with one another. The new structures may split up workers who have formed friendships.

3.8.1.14 Competition

The limited number of positions available for promotions some times causes people to compete excessively for the positions. As organization
restructure and remove layers of management, especially middle management, there are fewer positions available for career advancements.

3.8.1.15 Lack of participation in decision making

Managers have traditionally not involved subordinates in decision making. Consequently, employees typically feel that they have little control of the work environment in their lives.

3.8.1.16 Empowerment

The empowerment of employees offers advantages to the organization and its employees. Some employees appreciate the greater responsibility and decision-making authority and empowerment. But employees who have no interest in empowerment and responsibility may experience greater level of stress. Some people find group work stressful, and their work may suffer when they work in a team setting.

3.8.1.17 Conflict with other people

Organization, by their very nature, requires people to work with one another. The current trend is for employees to be assigned to work teams where they are more dependent on one another. The interaction with more people provides more opportunities for conflict between fellow employees. Some people like to work in teams, but there are others who find the interaction with others would inevitably result in conflicts.

3.8.1.18 Role demands

Role demands relate to pressures placed on a person as a function of the particular role he or she plays in the organizations. Role conflicts create expectations that may be hard to reconcile or satisfy. Role overload is experienced when the employee is expected to do more than time permits.
Role ambiguity is created when role expectations are not clearly understood and the employees are not sure what to do.

3.8.1.19 Interpersonal demands

Interpersonal demands are pressures created by other employees. Lack of social support from colleagues and poor interpersonal relationships can cause stress, especially among employees with a high social need.

3.8.1.20 Organizational structure

Organizational structure defines the level of differentiation in the organization, the degree of rules and regulations, and where decisions are made. Excessive rules and lack of participation in decisions that affect an employee are examples of structural variables that might be potential sources of stress.

3.8.1.21 Repetitive Nature of Work

It is a commonly accepted fact that the monotony of the same kind of work in IT industry. The male freshers seem to the group particularly affected. Again, solutions are not readily available, though measures like hiring retired personnel or housewives might be of some succor, since these groups with more experience tend to get frustrated the least. Some others have also devised innovative measures, like periodic job rotation, though not much can be expected out of these in a pure IT industry environment. Insufficient Holidays also creates stress in the industry. Most of the employees have to work on all Indian calendar holidays.

3.8.1.22 Travel Time

Most IT companies are located on the outskirts of cities, and therefore most employees spend a long time traveling to and from their
offices. Again, this is unique to the Indian industry and cannot be easily wished away. Most IT companies require large manpower influxes in order to scale up and grow, and to support such huge workforces, they need lots of real estate. And exorbitant land prices inside cities necessitate their movement to the outskirts. Therefore, most of the IT companies in India affected by this factor.

3.8.1.23 Overtime

Most of the IT companies encourage overtime with incentives. Especially the first timers, who, with the goal of making more money, willingly do overtimes, but once they are into it, the stress factor starts showing up. Overtime, in concert with long working hours and travel time, is turning out to be a potent combination, causing IT related stresses

In nutshell, the factors that commonly cause work-related stress include:

- Long hours
- Heavy workload
- Changes within the organisation
- Tight deadlines
- Changes to duties
- Job insecurity
- Lack of autonomy
- Boring work
- Insufficient skills for the job
- Over-supervision
- Inadequate working environment
• Lack of proper resources
• Lack of equipment
• Few promotional opportunities
• Harassment
• Discrimination
• Poor relationships with colleagues or bosses
• Crisis incidents, such as an armed hold-up or workplace death.

3.9 DIFFERENT STRESS REDUCTION TECHNIQUES USED BY IT COMPANIES

Industrial stress is important on account of distress caused not only to individuals but to society as a whole. Stress in industry occurs at every level. It is usually of psychological rather than physical origin and may originate outside industry. The causes of stress in shop-floor workers, junior management and senior management are considered. They usually involve injuries to self-esteem, or insecurity, isolation or responsibility. Symptoms and signs of acute and chronic stress are described. Prevention of stress in shop-floor workers includes good personnel practices, fair treatment, good communications and participation, and giving gratitude or praise. Remedies for the problems of management involve selection, education and training, organization and communications. The major stress management strategies adopted by the selected study units are discussed in the following lines.

3.9.1 Stress Control Workshop

The IT companies conduct periodical workshops for control and reduction of stress. Such workshops help the employees to learn the dynamics of stress and methods of overcoming their ill effects. Similarly, the IT companies also makes arrangements for assisting the employees in
overcoming their personal and family problems. This arrangement may include managing personal finance, dealing with family problems, health problems, and other kinds of personal and family stress. The number of stress control workshops conducted by the selected IT companies during the year 2007-2011 is shown in table 3.3.

**TABLE 3.3**

**STRESS CONTROL WORKSHOP**

<table>
<thead>
<tr>
<th>Name of the Company</th>
<th>No. of Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tata Consultancy Services Ltd.</td>
<td>24</td>
</tr>
<tr>
<td>Infosys Limited</td>
<td>18</td>
</tr>
<tr>
<td>Wipro Technologies Ltd.</td>
<td>22</td>
</tr>
<tr>
<td>Cognizant Technology Solutions India Pvt. Ltd.</td>
<td>15</td>
</tr>
<tr>
<td>HCL Technologies Ltd</td>
<td>13</td>
</tr>
<tr>
<td>L&amp;T Infotech</td>
<td>21</td>
</tr>
<tr>
<td>Mahindra Satyam.</td>
<td>08</td>
</tr>
<tr>
<td>Tech Mahindra Ltd</td>
<td>06</td>
</tr>
<tr>
<td>Aegis Limited</td>
<td>02</td>
</tr>
<tr>
<td>CSC, India</td>
<td>05</td>
</tr>
</tbody>
</table>

Source: Records of the company

Table 3.3 shows the number of stress control workshops conducted by the selected IT companies during 2007-2011. TCS conducted large number of such workshop followed by Wipro Technologies Ltd, L&T Infotech and Infosys Limited.

3.9.2 **Seminars on Job Burnout**

Job burnout refers to the emotional exhaustion, depersonalization, and reduced accomplishment sometimes experienced by those who work with
people or do “people work” of some kind. It is a response to the chronic emotional strain of dealing with other human beings, particularly when they are troubled or have problems. Job burnout is now recognized as a major work stress problem. Therefore the IT companies have conducted a number of seminars on job burnout, which help employees to understand the nature and symptoms of job problems such as workshops on role clarity and analysis. The number of seminars conducted by the selected IT companies during the period 2007-2011 is presented in table 3.4.

**TABLE 3.4**

**SEMINARS ON JOB BURNOUT**

<table>
<thead>
<tr>
<th>Name of the Company</th>
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<tbody>
<tr>
<td>Tata Consultancy Services Ltd.</td>
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<td>19</td>
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<td>Wipro Technologies Ltd.</td>
<td>31</td>
</tr>
<tr>
<td>Cognizant Technology Solutions India Pvt. Ltd.</td>
<td>15</td>
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<td>04</td>
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<tr>
<td>CSC, India</td>
<td>08</td>
</tr>
</tbody>
</table>

Source: Records of the company

Table 3.4 indicates the number of seminars on job burnout conducted by the selected IT companies during 2007-2011. Wipro Technologies Ltd., has conducted more such seminars followed by Tata Consultancy Services Ltd and Infosys Limited.
3.9.3 Stress Management Training

Stress management training may include instruction in time management, goal setting, counseling of subordinates, self-awareness, relaxation techniques, conflict resolution and identification of stress situations and symptoms. The IT companies have conducted a number of stress management training programmes to impart the ill effect of stress on its employees and the management of work related stress. The number of programmes conducted by the study units during 2007-2011 is shown in table 3.5.

**TABLE 3.5**

**STRESS MANAGEMENT TRAINING**

<table>
<thead>
<tr>
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<td>CSC, India</td>
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</tbody>
</table>

Source: Records of the company

Table 3.5 exhibits that the number of stress management training programmes conducted by the selected IT companies during 2007-2011. Tata Consultancy Services Ltd., has conducted large number of 20 stress
management training programme. Wipro Technologies and Infosys limited have conducted 18 and 15 such programmes to reduce level of stress for their employees.

3.9.4 Tour Programme

The IT companies arrange tour programmes periodically to reduce stress level of the employees. The number of tour programmes have organized by the IT companies during 2007 – 2011 is shown in table 3.6.

**TABLE 3.6**

**TOUR PROGRAMME**

<table>
<thead>
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<td>02</td>
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<tr>
<td>CSC, India</td>
<td>05</td>
</tr>
</tbody>
</table>

Source: Records of the company

Table 3.6 shows the number of tour programmes organized by the selected IT companies for reducing stress of its employees. Among the selected companies, TCS have arranged 18 programmes, Wipro Technologies
Ltd have arranged 15 and Infosys Limited have organized 12 such programmes during 2007-2011 to reduce of the employees.

3.9.5 Networking

Networking is the formation of close associations with trusted, empathetic co-workers and colleagues who are good listeners and confidence builders. Such persons provide mental support to get the person through stressful situation. Considering this formation as one of the effective low cost stress management techniques, the IT companies create a team for completing a specific task/project. The team members are mostly closely associated with each other, this helps the employees for mutual sharing of their concerns and paved the way for control and reduction of stress for each other.

3.9.6 Supportive Organizational Climate

Many large organizations today tend to be highly formalized bureaucratic structures with accompanying inflexible, impersonal climates. Many of the organizational stressors emerge because of faulty organizational processes and practices. This can lead to considerable job stress. To a very great extent, these can be controlled by creating supportive organizational climate. Supportive organizational climate depends upon managerial leadership rather than the use of power and money to control organizational behaviour.

The focus is primarily on participation and involvement of employees in decision-making process. Such climate develops belongingness among people which helps them reduce their stress. Therefore in order to reduce or prevent the employees stress the IT companies, have taken effort to increase participation and involvement of the employees in decision making process. In the IT companies, most of the major decisions are taken by the management after consultation with the middle level and lower level
professionals for developing the belongingness among employees which helps them reduce their stress.

3.9.7 Yoga and Meditation

The role of Yoga, a scientific technique of physical exercise to keep body fit and to overcome stress, has been recognized in most part of the world. Yoga helps the employees to better cope with their stress generally. It gives a great deal of relaxation, enhanced self-esteem, and helps them to get their mind off work for a while.

Impact of stress can be overcome by relaxation techniques. Meditation involves quiet concentrated inner thought in order to rest the body physically and emotionally. Transcendental meditation is one of the popular practices of relaxation. In this practice, the meditator tries to meditate for fifteen to twenty minutes a day, concentrating on the repetition of some mantra. Any meditation essentially involves a relatively quiet environment, a comfortable position, a repetitive mental stimulus, and a passive attitude. Meditation has been recognized as a powerful technique for reducing stress. Whether a person takes easy one or specific relaxation technique, the intent is to eliminate the immediately stressful situation or manage a prolonged stressful situation more effectively. Therefore in order to reduce the stress of the employees, the IT companies have provided Yoga, meditation, General Health and Wellness Programme to its employees. A teacher for teaching yoga and meditation is appointed by the company on a contract basis.

3.9.8 Celebrations

The IT companies have organized emotional well being programs, after any project or assignment completion, a small party is organized by the group members which is financed by the companies, office birthday is
celebrated, Fun and learn exercises and Celebrating birthdays of subordinates at the end of each month to reduce stress of the employees.

3.9.9 Technical Competence

Job sharing, further skill enhancement provided by companies, Lifestyle improvement programmes and Time management programmes are organized by the IT companies to improve technical competence of the employees.

3.9.10 Other Technique

Some measure are taken by the IT companies to reduce stress of its employees, they are;

- If employees are working on Saturdays, it be set off against any other weekday
- Free entertainment allowance for employee who are working for more than 3 years
- If an employee is working after working hours, company provides them with the traveling and food allowance
- Organizing sports activity
- Organizing social activity such as planting trees, helping children in orphanage.
- Picnics at a quarter intervals
- Further skill enhancement provided by companies
- Indoor and outdoor games organized by the companies
- Lifestyle improvement programmes
3.10 ORGANIZATIONAL COPING STRATEGIES

Organizational coping strategies are more of proactive nature, that is, they attempt at removing existing or potential stressors and prevent the onset of stress of individual jobholders. There are many organizational stressors, therefore, the organizational coping strategies revolve round those factors which produce or help producing stresses. Following are organizational coping techniques and efforts taken by the IT companies to remove existing or potential stressors and prevent the stress of employees.

3.10.1 Job Enrichment

A major source of stress is the monotonous and disinteresting jobs being performed by employees in the organization. Through more rational designing of jobs, jobs can be enriched. Improving content factors such as responsibility, recognition, opportunity for achievement and advancement, or improving core job characteristics such as skill variety, task identity, task significance, autonomy, and feedback may lead to motivation, feeling sense of responsibility, and utilizing maximum capability at the work. Such a phenomenon helps in reducing stress. Therefore, due care is given by the IT companies while designing jobs.

The management of the IT companies has taken efforts to increase the responsibility and authority of employees pertaining to a particular job. Employees are recognized at the right time for their good things. More and more opportunities for achievement and advancement of the employees are created. These help the employees of IT companies to reduce their stress.

3.10.2 Organizational Role Clarity

People experience stress when they are not clear about what they are expected to do in the organization. This may happen because either there is an
ambiguity in the role or there is a role conflict. Such a situation can be overcome by defining their role more clearly. Role analysis technique helps both managers and employees to analyze what the job entails and what the expectations are. Breaking down the job to its various components clarifies the role of the job incumbent for the entire system. This helps to eliminate imposing unrealistic expectations on the individual.

Therefore in order to avoid the role ambiguity, role conflict, and role overload the IT companies has clearly defined the organizational role of each employee from top to grass root level on the basis of Role analysis technique, which leads to reduction and prevention of stress among the employees in the organization.

To conclude, in IT companies, all types of strategies for stress reduction both by the individual and the organization do not necessarily guarantee that employees will not experience stress. However, such strategies adopted by the IT companies help in minimizing negative impact of stress.