2.1 INTRODUCTION

In our current “service economy” delivery of services is a major task for industry. Many organizations are now involved in delivering services of some kind and consider themselves as being “client-oriented” or “client-centered”. As a part of their company policy these organizations regard contact with their clients as a key feature of their company philosophy. Technological developments, such as information technology, have boosted this option. The internet offers appealing options in this regard since all kinds of information concerning the companies’ products or services can be provided via a website on the internet. Nevertheless, customers may want to contact the organization and talk to a customer representative, either to order the product or service, or to ask additional and specific questions. Therefore organizations are looking for ways to be accessible to their customers, to be able to promptly answer questions customers may have or to provide reliable and up-to-date information. In particular when the company sells products that are complex and entail all kinds of technical features, customers may have all sorts of questions. Therefore, organizations see the necessity to set up a “helpdesk” where customers can get answers to their queries without having to come to the shop again. And as a result of enlargement of scale, many organizations have their customers spread around the country, in some cases throughout the world. This evidently implies a huge number of contacts and organizations are looking for efficient ways to organize these contacts. The process of rationalization often results, according to Tayloristic tradition, in the decision to specialize the delivery of services. This has resulted in the creation of specialized departments for customer contacts; the call center.
Call centers are organizations or departments, which are specifically dedicated to contacting clients and customers. This can either be the helpdesk, or client service department of an organization, but companies may also have outsourced this to a dedicated call center, which handles all client contacts for a variety of organizations. Different types of call centers can be distinguished: (1) Inbound call centers which mainly respond to incoming calls and primarily deal with questions and complaints that customers may have. Client’s questions are frequently straightforward and simple requiring standard answers. (2) Outbound call centers are mainly for contacts that are initiated by the organization; they are primarily for attempts to sell a product or service. This also implies that call centers can harbor jobs of different levels of qualification, ranging from unskilled people, who provide standard information (sometimes even reading from prescribed scripts) to frequently asked questions, to highly qualified personnel who deal with unique complex problems (i.e., technology helpdesks). This means that, the popular claim of call centers being “Electronic sweat shops” is an unjustified generalization and oversimplification of the issue. Call centers indeed are the result of a modern rationalization process, but that does not mean that all people working in call centers have little variety and no control over their work (although it certainly is true for particular groups).

The reason for the burgeoning of the call center industry is its advantage in reducing costs and cutting staff, both of which can be accomplished by centralizing services, reducing branch offices close to the customer, and taking advantage of lower cost real estate and labour costs in locations outside main business centers (Richardson and Marshall, 1999). The centralization of service provision has enabled firms to
rationalize the work process through the extensive use of Information and Communication Technologies (ICTs), thereby maximizing the use of agent’s time. The standardization of service encounters with customers and the use of functionally equivalent and interchangeable service providers have also helped call centers to achieve great speed and efficiency in the delivery of their services (Gutek, 1995)\textsuperscript{142}. This is furthered by technological developments which allow for the disentanglement of time and place for both individuals and organizations. Companies can concentrate their customer information desk in a particular country and automatically route calls from a number of countries to this centre, without customers having to know that he/she is calling long distance or internationally. As a result, companies have begun to move some of their labour intensive operations to low wage countries (Dormann and Zijlstra, 2003)\textsuperscript{143}.

Control is an integral part of organizational functioning in call centers (Hatch and Cunliffe, 2006)\textsuperscript{144}. ICTs namely the automatic call distribution (ACD) and predictive dialing (PD) systems, that form the basis of call center operations set the stage for employee monitoring and surveillance (Houlihan, 2000)\textsuperscript{145}. This allows for the emergence, development and application of numerous techno bureaucratic measures that make it possible to control employee task performance. While the specific parameters of monitoring and surveillance vary across different organizations, they essentially encompass quantitative monitoring, which is based on the statistical information generated by the system in place, including measures such as number of calls taken, call handling time, call wrap-up time, call waiting time, sales effectiveness, etc., and qualitative monitoring which is based on the supervisor’s ability to listen to or record and
evaluate calls, covering measures such as accuracy of information, clarity of communication, politeness, adherence to a script, etc. (McPhail, 2002)\textsuperscript{146}.

Task performance in call centers (CCs from now on) requires employees to sit at a table in front of a computer, wearing a headset to communicate with the customer and leaving their hands free to enter data into the computer, if needed (Zapf et al., 2003)\textsuperscript{147}. (Zapf et al., 2003)\textsuperscript{147} maintain that call centre work is a skilled work, though the specific skills required vary between industry sectors, nature of job being performed, and business purpose and model of the organization. Despite the repetitive and standardized nature of work, the majority of agents have emphasized that certain sets of skills and competencies are required in call center work. In particular, they have stressed that the expertise is required in handling customers professionally efficiently and also under strict time pressures. Related to this, agents highlighted the skill involved in conveying the right image to the public over the phone. In addition to these skills in handling customers, agents also require computer skills. They involve operating the computer, performing data entry and accessing and moving between databases along with navigation presents no small challenge. They have to work under time constraints while simultaneously maintaining conversation to prevent ‘dead air’ with the customer. As skill development constitutes an important activity in call centers, it is a common practice to provide relatively long introductory training classes compared to other types of clerical work.

2.2 SIGNIFICANCE OF THE STUDY

Human resources are considered to be the most valuable and dynamic asset of the organization. They can take the organization to greater heights or can see that
organization surrenders itself to BIFR (Board for industrial and financial reconstruction). Stress is becoming an increasingly global phenomenon affecting all countries, all professions and all categories of workers, families and society in general. There is evidence that the experience of stress at work is associated with changes in physiological, social, psychological and behavioral functions, which may be detrimental to the employees’ health. Stress may contribute to the development of various symptoms of occupational ill health and of physical & psychological disorders in the employees. The emerging approach for intervention focuses on a pro-active response to stress, with emphasis on preventive measures and elimination of the causes of stress, rather than on the treatment of its effects. This complex issue is covered by a broad field of research activities. The Information Technology Enabled Services (ITES) is no exception to this malaise, call centre agents work in prolonged shifts round the clock, while accomplishing many tasks simultaneously under tight deadlines. To provide real-time services to global customers, call centre agents have to compromise with their own biological clocks. Consequently they become easy prey to various psycho-physiological ailments. CCS need to pay special attention to the management of their human resources due to their unique nature of work where the front-line worker becomes the central figure. It is therefore, important, to attract, retain and keep employees motivated and efficient. This can ensure the delivery of a good quality service to customers. Over the past few years, a number of studies related to the stress and management of human resources in CCS have been conducted. The existing literature highlights that most of these studies have been conducted in developed countries and the scarcity of research on the management of human resources in Indian International CCS. Given the rapid growth
in the sector, involvement of a large number of both national and multinational firms and a significant impact of BPO’s to India on the global economy, it is important to have best human resource management practices for the growth of ITES/BPO industry. An attempt is being made in the present study to find out the causes and consequences of occupational stress in CCs. Such an investigation will have both academic (i.e. nature and causes of stress and its impact on CCAs in the Indian setup) and practical (how to manage human resources in the CC context) implications.

2.3 PURPOSE OF THE STUDY

Occupational stress is everywhere in the corporate world. It can occur for everyone in any position in any industry. Stress can affect high level agents, middle level managers and lower level employees. The various stress related problems like coronary heart disease, hyper tension, diabetics, gastro intestinal disorders, peptic ulcer, asthma, migraine, alcoholism, drug addiction, depression etc, are accountable for poor health. These problems are further affecting organizational performance adversely by contributing to poor productivity, low employee turnover and low level of job satisfaction.

The increased stress related costs are fostering the organization to identify the various approaches to study stress at work. The present study is designed to investigate the impact of work related stress on call centre agents of ITES/BPO sector with reference to demographic, independent variables i.e., age, gender, level of experiences, type of service, years of experience in present organization and call center industry, marital status, type of industry and the various consequences of stressors like physiological,
cognitive, emotional & behavioral and turnover intentions of the call centre agents (CCAs from now on)

2.4 RESEARCH GAP

Several research studies undertaken so far have emphasized on factors which are causing/effecting stress and the various consequences of stress, and turnover intentions among CCAs in different countries. Very few studies have been conducted in the Indian context. As there are differences among job opportunities, sex, qualification and working conditions from a country to country and considering paucity of research in Indian context in general and in Hyderabad city in particular, the researcher has considered to conduct occupational stress causing factors and its consequences among CCAs working in Hyderabad.

Occupational stress among call center agents in Indian international call centers was conducted earlier by many researchers, but there is a gap which needs to be filled up. Gap related to the factors in specific causes of stress among the employees and their contribution towards various types of consequences and turnover intentions. This type of study has not been conducted earlier for the call centers in Hyderabad. Through the present study the researcher also made an attempt to identify

- Individual factors/stressors contributing to overall stress,

- Stressors causing physiological symptoms, cognitive responses, emotional responses, behavioral responses and turnover intentions among CCAs; and

- Stressors leading to turnover intentions among CCAs.
2.5 HYPOTHESES OF THE STUDY

For the purpose of this study, a research hypothesis is formulated to test and find out significant differences among various independent variables to the occupational stress. In order to find out the presence of significant differences among gender, age group, years of experience in present organization, call center industry, qualification, marital status, type of service, place of client, average number of calls made and received by CCAs, average number of working hours in a day, primary work function and primary industry served by CCAs, the following hypotheses are formulated. Hypotheses are tested based on the overall score calculated by adding all the 12 factor scores of OSI for each demographic variable.

**Hypothesis 1:**

H₀: The occupational stress among male and female CCAs is one and the same.

H₁: The occupational stress among male and female CCAs is not the same.

**Hypothesis 2:**

H₀: There is no significant difference of occupational stress among CCAs of different age groups.

H₁: There is significant difference of occupational stress among CCAs of different age groups.

**Hypothesis 3:**

H₀: The occupational stress among CCAs with different years of experience in the present organization is one and the same.
H_1: The occupational stress among CCAs with different years of experience in the present organization is not the same.

**Hypothesis 4:**

H_0: The occupational stress among CCAs with different years of experience in the call center industry is one and the same.

H_1: The occupational stress among CCAs with different years of experience in the call center industry is not the same.

**Hypothesis 5:**

H_0: The occupational stress among CCAs with different qualification levels is one and the same.

H_1: The occupational stress among CCAs with different qualification levels is not the same.

**Hypothesis 6:**

H_0: The occupational stress among unmarried and married CCAs is one and the same.

H_1: The occupational stress among unmarried and married CCAs is not the same.

**Hypothesis 7:**

H_0: The occupational stress among inbound and outbound CCAs is one and the same.

H_1: The occupational stress among inbound and outbound CCAs is not the same.

**Hypothesis 8:**

H_0: The occupational stress among CCAs making and receiving number of calls in a day are one and the same.

H_1: There is a significant difference among CCAs making and receiving number of calls in a day with respect to occupational stress
Hypothesis 9:
H₀: The occupational stress among CCAs working for 10 hours and 9 hours are one and the same.
H₁: There is a significant difference between CCAs working for 9 hours and 10 hours with respect to occupational stress.

Hypothesis 10:
H₀: The occupational stress among CCAs providing services to customers in different countries is one and the same.
H₁: The occupational stress among CCAs providing services to customers in different countries is not the same.

Hypothesis 11:
H₀: The occupational stress among CCAs providing various types of service to customers is one and the same.
H₁: The occupational stress among CCAs providing various types of service to customers is not the same.

Hypothesis 12:
H₀: The occupational stress among CCAs serving various types of industries is one and the same.
H₁: The occupational stress among CCAs serving various types of industries is not the same.
2.6 RESEARCH OBJECTIVES

The specific objectives of the present study are,

1. To identify job related stressors among call centre agents of ITES/BPO sector.

2. To investigate the effect of work related stress on call centre agents with reference to demographic variables (gender, age, etc.)

3. To study the consequences of the stressors i.e., physical, cognitive, emotional, behavioral and turnover intentions on the call centre agents with reference to demographic independent variables.

4. To study the extent of impact shown by the occupational stressors on various types of consequences of stress and turnover intentions of the call centre agents.

5. To find out the role played by the call center organizations and various associations to combat call center agents’ stress.

6. To offer suggestions to overcome the problems related to stress.

2.7 SCOPE OF THE STUDY

The scope of the study has been designed to know the stressors of call centre agents working for international clients (International call centers). The sample size includes 781 CCAs working for 7 Indian International call centers in Hyderabad. The study also tries to find out the consequences of stress on turnover intentions of CCAs working for this call centers. An attempt is also made to find out and know the role of the organizations (Impact BPO solutions, Visana technologies, Rayapati technologies, Varun technologies, Hertz Infotech Pvt. Ltd, Aegis BPO services, Genpact BPO services) and various bodies to combat stress among the CCAs. The scope of the study is restricted to only the international call centers providing third party services, operating from
Hyderabad. According to Batt. (2005)\textsuperscript{202}, Anders Kjellberg et al. (2009)\textsuperscript{234} third party service providers are exposed to more occupational stress because of lack of variety in work tasks and work postures compared with CCs providing captive services.

\section*{2.8 RESEARCH METHODOLOGY}
\subsection*{Population and Sampling}

Sampling is a process of selecting a few from a bigger group (the sampling population) to become the basis of estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the bigger group.

Population: It is the predefined set of potential respondents (elements) in a geographical area. In the present research the entire population is call centre agents (CCAs) working for various Indian International call centers which are providing third party outsourcing services all over India. In the present study one of the major IT hubs in India, Hyderabad city is selected. The potential respondents are the CCAs working for Indian International call centers working in Hyderabad.

Hyderabad is rightly known as, the high-tech city. IT and ITES in Hyderabad is renowned world over and it is the hub of information technology in our country. Many call centers, Business process outsourcing (BPO) firms, dealing with IT and ITES services were set up in the 1990s making it the hub of BPO firms. The progress of a township, with state-of-the-art services called HITEC city, encouraged several IT and ITES companies to setup operations in the city. A rapid growth of technology in this area, has led civic boosters to call the city “Cyberabad”. Hyderabad has also been referred to as the second Silicon Valley of India after Bangalore. There have been widespread investments in digital infrastructure within the city which includes several multinational
corporations which have established centers in the city. Hyderabad also, has the merit of being the Software training capital. The city offers innumerable number of software courses that are taken up by thousands from all over the world. Hyderabad is on the brink to become a global city as it has been selected as the location for India’s first Fab City, a silicon chip developing facility, being setup with an investment of $3 billion by the AMD-SemIndia syndicate.

The sample for the study has been selected adopting a two stage sampling procedure. In the first stage the area from where the sample needs to be collected was identified and the type of organizations, from where the subjects are to be drawn for constituting the sample was also specified. Out of all the places which are known for a rapid growth in the IT/ITES services Hyderabad (capital of Andhra Pradesh) is predominant. Based on the criteria of convenience Hyderabad has been considered for inclusion in the study.

In the second stage 781 CCAs working for 7 different international call centers (Impact BPO solutions, Visana technologies, Rayapati technologies, Varun technologies, Hertz Infotech Pvt. Ltd, Aegis BPO services, Genpact BPO services) which are providing third party outsourcing services located in Hyderabad from a total population of 39 call centers (statistics as on December, 2007) were randomly selected to constitute the samples for the present investigation. The sample size calculation and division of total sample among 7 different call centers is shown in the Table No.1. The respondents were distributed a questionnaire and were requested to return back within a week’s time by making reminders through follow up calls. Out of the total sample respondents 633
respondents have returned the completed questionnaire thus making it a total return percentage of 81%, which was quite good for the study.

**Sample size calculation**

\[ n = \frac{(Z*S)^2}{E^2} \]

Where \( Z \) = the Z score from the standard normal distribution of the confidence level desired by the researcher.

\( Z = 1.96 \), equivalent to a 95% confidence level.

\( S \) = the population standard deviation from the variable which is measured by considering sample 50 respondents and it is 1.426.

\( E \) = the third value required for calculating the sample size required is ‘E’ called tolerant error in estimating the variable. In the present research the value is 10%.

\[ n= \frac{(1.96*1.426)^2}{(0.10)^2} = 781 \]

The sample size of each call center considered in the study is based on the size and number of CCAs working in the respective call centers and is shown in Table No. 1

**Measurement of Occupational stress**

The Occupational Stress Index (OSI) instrument is used in this study to obtain the statistics required for measuring stress and testing the hypothesis. The scale was constructed and standardized by Dr. Srivastava and Dr. Singh (1981). It purports to measure the extent of stress, an employee experiences, due to various constituents and conditions of his occupation. It is a self-reporting instrument, consisting of 46 items, along with five point rating scale. 28 of the items are positively phrased, while 18
negatively phrased. The respondent is required to answer each item by stating whether he/she strongly disagree, disagree, undecided, agree or strongly agree.

Table No.1 Table showing sample size of the respondents

<table>
<thead>
<tr>
<th>Name of the organization</th>
<th>Number of sample respondents</th>
<th>No. of CCAs actually responded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact BPO services</td>
<td>45</td>
<td>35</td>
</tr>
<tr>
<td>Visana Technologies</td>
<td>80</td>
<td>69</td>
</tr>
<tr>
<td>Rayapati Technologies</td>
<td>70</td>
<td>56</td>
</tr>
<tr>
<td>Varun Technologies</td>
<td>70</td>
<td>49</td>
</tr>
<tr>
<td>Hertz Infotech</td>
<td>100</td>
<td>81</td>
</tr>
<tr>
<td>Aegis Ltd.</td>
<td>200</td>
<td>162</td>
</tr>
<tr>
<td>Genpact Ltd.</td>
<td>216</td>
<td>181</td>
</tr>
</tbody>
</table>

Source: Primary Source

The index assesses occupational stress with regard to twelve dimensions of occupation. These dimensions include role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic improvement, low status, strenuous working conditions and unprofitability. The occupational stress index is scored to yield twelve scores pertaining to the dimensions measured. The twelve scores are also cumulated together to obtain a single overall score on occupational stress. The more the score on index, greater is the occupational stress experienced by the respondents. Authors of the test report the reliability coefficient (Cronbach \( \alpha \)) to be ranging from 0.51 to 0.92 (Srivastava and Singh, 1981)\(^{149}\).
For studying the consequences of stressors, an instrument used to measure the symptoms (physiological, cognitive, emotional, and behavioral) over the past six months was used. This general instrument was borrowed from the book ‘Principles of Stress Management’ authored by Vera Peiffer. The consequences were measured in terms of physiological symptoms, cognitive responses, emotional responses, behavioral responses, on a dichotomous scale. The instrument consists of 25 physiological symptoms, 14 cognitive responses, 15 emotional responses and 14 behavioral responses. The more the score on the scale, the higher are the symptoms. In addition to the above two scales, three questions relating to turnover intentions of the CCAs were also asked. Data for these questions were collected on a five point scale, with the items agree, tend to agree, undecided, tend to disagree and disagree. Lesser the score of the scale more shall be the turnover intentions of the respondents.

Besides, a personal data sheet was also used to obtain information concerned with particulars of CCAs. The items included are name of the employee, organization, designation, sex, age, number of years of experience in call center industry and present organization, qualification, marital status, type of service, place of client, average number of calls made/received in a shift, average number of working hours in a day, primary work function, primary industry served by call center.

Analysis of the data

The primary data collected from the respondents (CCAs) by using questionnaires was analyzed using descriptive statistical tools like mean, standard deviation to find out the average scores of stress and deviations of stress scores from the mean scores. To find out the relationship between stressors and consequences of stress, turnover intentions
multiple regression was calculated among predictors and dependent variables. Post hoc analysis technique was applied to find out significant difference between the samples. Tukey analytical technique was applied to conduct post hoc analysis.

**Table No.2**

**Table showing Occupational Stress Index norms**

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>Levels of occupational stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (Below-1∞)</td>
</tr>
<tr>
<td>Role overload</td>
<td>6-14</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>4-9</td>
</tr>
<tr>
<td>Role conflict</td>
<td>5-12</td>
</tr>
<tr>
<td>Unreasonable Group &amp; Political pressure</td>
<td>4-9</td>
</tr>
<tr>
<td>Responsibility for persons</td>
<td>3-7</td>
</tr>
<tr>
<td>Under participation</td>
<td>4-9</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>3-7</td>
</tr>
<tr>
<td>Poor peer relations</td>
<td>4-8</td>
</tr>
<tr>
<td>Intrinsic Improvement</td>
<td>4-9</td>
</tr>
<tr>
<td>Low status</td>
<td>3-6</td>
</tr>
<tr>
<td>Strenuous working conditions</td>
<td>4-9</td>
</tr>
<tr>
<td>Unprofitability</td>
<td>2-4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46-122</td>
</tr>
</tbody>
</table>

Source: OSI Srivastav and Singh

In order to know the intensity of occupational stress, consequences of stress and turnover intentions, norms prepared by the developer of the instrument, (Srivastav and
Singh\textsuperscript{149} has been considered. Norms have been prepared, for the occupational stress index as a whole, as well as its twelve sub-scales separately. To prepare the norms method of normal distribution was adopted by the researcher. The scores were divided into three categories, i.e., high, moderate and low, following the principle of normal distribution.

The scores falling above $+1\infty$, between $+_1\infty$ and $-1\infty$ were categorized, respectively as to indicate high, moderate and low levels of occupational stress. The mean scores falling above $+1\infty$ based on the collected sample of 633 call center agents of different organizations, were considered to be working under high stress, the mean scores falling between $+_1\infty$ were considered to experience moderate stress in their jobs and the scores less than $-1\infty$ were categorized and shown under employees with low stress.

**Limitations**

Research survey inherently has certain limitations.

- Use of self report instrument presents certain limitations. It is not possible to know the state of mind of CCAs when they complete the instrument.

- All the factors which lead to stress are not covered.

- Only the causes of stress, its consequences and turnover intentions were studied. Different intervening variables like personality, leadership could be added to the present study.
• The study is conducted on third party service provider call centers but not captives, as the CCAs working for third party service providers are exposed to higher stress when compared to captives.

• The study is conducted in call centers which are international based and operated from Hyderabad. Call centers in other cities may show different results.

2.9 REVIEW OF LITERATURE

In today’s organizations due to the increasing competition, employees strive to reach their stringent targets, which are eventually making them feel stressed in their jobs. Call centers are no exception to this type of stressors. CCAs working for various call centers throughout the world, are experiencing these types of stressors in their jobs.

Sajeev Sharma (2007)\textsuperscript{150}, in his article, ‘Human issues in call centers and BPO industry-a report’ has stressed on the four key stressors the call center agents are facing with. They are nature of job, quality/quantity conflict, work targets and intensity & routine. Spending all day on phone dealing with people one after another, day after day, is difficult. Doing it under constant pressure to keep call volumes up, with no time between calls to recover from an ‘awkward call’ or from ‘customer rejection’, and doing it with very little authority or autonomy to rectify problems that arise, is perhaps the most difficult task. Many studies report agents as wanting to ‘just get off the phones’. Secondly organizational rhetoric in inbound call centers is concerned with ‘customer care’, or ‘keeping customers happy’ (providing quality service), yet these goals are juxtaposed with an ongoing pressure to keep call times down and call volumes up.
Aziz, (2003)\textsuperscript{151}, in his study reported that call centre agents suffer from high levels of stress. In their exhaustive research on stress amongst call-centre agents, Luce & Juravich (2002)\textsuperscript{152} identified various stressors and their general effect on the call centre agents. These factors have been presented in the table no.3. In a study conducted by Lynn Holdsworth and Susan Cartwright (2003)\textsuperscript{153}, on “Empowerment, stress and satisfaction: an exploratory study of a call centre”, it was found that the call centre agents were more stressed, less satisfied and reported poorer mental and physical health than the general working population. In addition, the sample perceived themselves as less empowered than other workers in a traditional office environment.

Table No.3

<table>
<thead>
<tr>
<th>S.No</th>
<th>Stress factors</th>
<th>Percentage that report factor causes “very much” (or) “much stress”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demanding customers</td>
<td>78%</td>
</tr>
<tr>
<td>2</td>
<td>Time pressure</td>
<td>69%</td>
</tr>
<tr>
<td>3</td>
<td>Monitoring</td>
<td>60%</td>
</tr>
<tr>
<td>4</td>
<td>Pressure to complete calls</td>
<td>60%</td>
</tr>
<tr>
<td>5</td>
<td>Changes in policy/procedure</td>
<td>59%</td>
</tr>
<tr>
<td>6</td>
<td>Treatment by management</td>
<td>49%</td>
</tr>
<tr>
<td>7</td>
<td>Threat of outsourcing/consolidation</td>
<td>46%</td>
</tr>
<tr>
<td>8</td>
<td>Lack of training</td>
<td>41%</td>
</tr>
<tr>
<td>9</td>
<td>Mandated scripting</td>
<td>40%</td>
</tr>
<tr>
<td>10</td>
<td>Attendance policy</td>
<td>40%</td>
</tr>
<tr>
<td>11</td>
<td>Dealing with technology</td>
<td>28%</td>
</tr>
<tr>
<td>12</td>
<td>Inability to take breaks</td>
<td>24%</td>
</tr>
<tr>
<td>13</td>
<td>Pressure to sell services/products</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: A report on work life of call center representatives by Luce et al.

Dataquest (India) conducted a BPO employee survey in (2004). Their survey focused on issues such as employee satisfaction and employee stress factors, among other things. The survey results can be found in Dataquest (2004)\textsuperscript{154}, De (2004)\textsuperscript{155}. According
to De, while 49% of the respondents said they joined the industry because they were attracted by the salary, 54% said they would also quit because of the salary (i.e., because a better salary was offered by a competitor). While this may suggest that salary is the main motivation for the high attrition rates. It can be interpreted that the constant pull of higher salaries and the change resulting from that may actually be a symptom of a bigger problem, one related to the health of the BPO workers, most of whom are young college graduates. According to De, “Young English speaking Indians, who work in call centers in India, are exposed to a host of health problems. Because of the time difference between India and the US, the work for call center employees in India starts late in the evening and goes on till dawn. Such odd hours bring in a host of health problems including digestive issues, hair loss, back pain and stress. Some girls have developed menstrual problems. Orthopedic problems and sharp increase in nicotine consumption are common features. The strain of assuming foreign accents, not to mention personalities for long periods, causes everything from sore throats to personality disorders. Though call centers in India claim that they try to make life better for the workers by improving the overall work environment, all said and done, there is no alternative to a good night’s sleep.”

According to Richardson et al., (1999)\textsuperscript{141}, supervisors with the help of technology can track the performance of the CCAs at any point of time. Thus, the supervisor can be aware of what the agent is doing at any moment of the working day. The computer screen also allows the supervisor to see if a call is taking more than the prescribed time. The ‘time displays’ adjacent to each agent’s name flash at a pre-determined threshold of average call time. When an agent’s box flashes, the supervisor can listen in to determine
why the call is so lengthy. The supervisor can also listen into any call, and this is done on a regular basis, to assess the agent’s performance which creates stress among CCAs.

Another important problem, that is beginning to manifest among call center workers in India is, the stress resulting from having to deal with constant verbal abuse, mostly from anti-outsourcing elements, unemployed IT professionals in US, or even racist thrill seekers who have reacted to the constant anti-outsourcing messages in the media that often paints a gloomy picture of white-collar job losers in the US due to the rise of BPO firms in India. Several instances of verbal abuse have been recorded in the media (Lakshmi, 2005)156.

Simone Grebner et.at., (2001)157, in his study compared 234 call centre agents with 572 workers in traditional jobs with long lasting training revealed lower job control and task complexity/variety and higher uncertainty among call agents. However time pressure, concentration demands and work interruptions were found lower in call agents. Within the call agent sample, controlling for negative affectivity and other working conditions, job control predicted intention to quit and job complexity/variety predicted job satisfaction and effective commitment. Social stressors and task-related stressors predicted unique indicators of well-being and job-related attitudes. Furthermore data confirms the role of emotional dissonance as a stressor in its own right as it explained variance in irritated reactions and psychosomatic complaints beyond other working conditions. Results indicate that strong division of labor may be a rather general phenomenon in call centers.
In a study by Zhong Ming Benjamin Siong (2006) on predicting intentions to quit in the call center industry, conducted on 126 call center representatives it was found that stressors like role overload and monotony played bigger role in the intention to quit. David Holman (2002) findings from his study ‘Employee well-being in Call centers’ are often perceived to have a negative impact on employee well-being in call centers and is mainly attributed to four factors, i.e., job design, performance monitoring, HR practices and team leader support. The article reports on a survey of 557 customer service representatives that examined the relationship of these factors to four measures of wellbeing, i.e., anxiety, depression and intrinsic and extrinsic job satisfaction. Results demonstrated that, the factors most highly associated with wellbeing were high control over work methods and procedures, a low level of monitoring and a supportive team leader. Evidence also indicates that the level of wellbeing in some call centers is similar to that in other comparable forms of work.

Irate calls are a mainstay of customer service work in any country. Many Indian call-center workers say that they regularly face particular abuses from Americans whose tantrums are sometimes racist and often inspired by anger over outsourcing and this has become one of the major stressful factors for Indian call center agents. Debalina Das, 22, a computer help-line agent in Hyderabad city of south India, punched the button once for a call from the United States. The caller greeted her with a torrent of racial and sexual slurs, accused her of "roaming about naked without food and clothes". (Mike McPhate).
Customers provide both joy and sadness to call centre employees, illustrate Benson’s (1986) claim that customers are both the friend and the enemy. While irate customers are systematic parts of social relations in service work (Deery et al., 2002, Korczynski, 2003) shows that abuse and hostility are likely to be higher in telephonic interactions due to the absence of face-to-face contact or physical proximity and that irate customers upset agents, precipitating dejection and low morale.

Korczynski’s (2003) observation that management knew how employees felt, but they expected them to put up with the abuse to keep business going. Thus, reacting negatively to irate customers would result in punishments for the employees. Wharton (1993) cautions that there is a difference of opinion between what employees might feel towards their customers and what they are expected to display could be difficult to resolve and could precipitate severe anxiety.

According to McPhail, (2002), most call centers employ a combination of quantitative and qualitative measures depending on their business purpose and the management ideology and performance on these are utilized to determine employee rewards, promotions, disciplinary actions, training needs and so on (Richardson et al., 1999). Monitoring and surveillance thus contribute to maintaining the pace and standards of work, precipitating intensity and stress (Richardson et al., 1999). Karlqvist et al., (2002) has argued that call center management is infused with two conflicting logics, a need to be cost efficient and a desire to be customer oriented. K.Norman, et al. (2008) in his survey of psychosocial conditions in one call center company found that operators reported a high level of work intensity, poor support from their immediate
supervisor and limited opportunities to influence their work. Deery and co-workers (2002)\textsuperscript{167} found a relatively high incidence of stress among call centre staff in Australia. According to V.Malinauskiene et al. (2005)\textsuperscript{168} and T.Theorell et al. (1996)\textsuperscript{169} machine-regulation of the work has also reduced the operator’s autonomy and control which has repeatedly been found to be a risk factor for health and well-being, especially when it is combined with high demands and weak social support. According to M.J.Smith et al. (1992)\textsuperscript{170}, L.Schleifer et al. (1996)\textsuperscript{171}, M.J.Smith et al. (1989)\textsuperscript{172}, D.Holman et al. (2003)\textsuperscript{173}, A.B.Bakker et al. (2003)\textsuperscript{174}, D.Ditecco et al. (1992)\textsuperscript{175}, the possibility to supervise and control the performance of call center operators is a potentially important stressor.

**Emotional stress**

Call center work requires a high degree of personal contact with the public and performance of what has been termed “emotional labor” (A. Hughschild, 2003)\textsuperscript{176}. The emotional load on operators mainly comes from confrontations with angry and unsatisfied customers. Morris and Feldman (1997)\textsuperscript{177} have proved from their study that intense interpersonal interactions with clients may cause emotional exhaustion. During service transactions, employees are expected to display emotions that comply with certain norms or standards of the organization, which are designed to create a desired “state of mind” in the customer. In voice-to-voice service work this has been characterized as “smiling down the phone” (V.Belt et al., 1999)\textsuperscript{178}, According to Erickson and Wharton (1997)\textsuperscript{179}, employees are expected to “appear happy, nice and glad to serve the customer” in spite of any private misgivings or any different feelings they may have. Indeed, a key
feature of interactive service work is the presentation of emotions that are specified by the organization and are embodied in the rules of employment.

Hoghs child (2003)\textsuperscript{176} finds that women might be more likely to suffer negative effects of emotional labour than men since they adapt more to the needs of others and cooperate more than men. Moreover, women who perform a “second shift” of emotional work at home may be more vulnerable to the negative effects of their paid work. Mc Donald and Siriani (1996)\textsuperscript{180} argue that women are expected to be more empathetic than men and do tolerate more offensive behavior from customers.

A.Kjellberg et al, (2007)\textsuperscript{181} observed that stress is expected to be influenced mainly by the psychological demands, whereas the energy level has been found to be more closely related to control and social support. Call center agents are usually instructed to be friendly, enthusiastic, polite and helpful to customers even if customers are rude (which is not a rare event) and this induces further demands with respect to the volitional presentation of emotions, in opposition to those being actually felt, which is referred to as emotional dissonance. As many call centers use monitoring procedures such as test calls and recording of calls, violations of this norm will be easily detected. Recent research shows that the control of one’s own emotions (e.g., by suppression, hiding, or overplaying emotions) can have serious consequences. This form of emotion regulation consumes volitional energies and often leads to the development of emotional exhaustion, a component of the burnout syndrome (for reviews of burnout and emotional labor at work).

\textbf{Attrition among call center agents}
Labor turnover is an important problem faced by the management of call center organizations today (Bain and Taylor, 1999), Taylor and Bain, (1999). The reasons attributed to this are the pressures of job, lack of promotion opportunities, working time, work-life balance, ‘phone-rage’, and the repetitive nature of work (Deery and Kinnie, 2004), Houlihan, (2004). Today most top agents acknowledge that a steady turnover of staff is an inevitable aspect of the industry. The reasons for this could be, boredom with the job, seeking better prospects or a change, better monetary benefits and lack of career opportunities especially when it comes to vertical growth which is very minimum or even the failure of the call center to effectively train employees to stay at the job. Because the work is so repetitive, most employees leave within 2 years. Ambitious youngsters, out to make a fast buck, hop skip and jump across BPO companies, making staff turnover the single largest issue for business leaders and boardrooms. In a study conducted by Sanjeev Sharma (2007) on ‘Human issues in call centers and BPO industry- a report’ he found that absenteeism is very high in call centers. Employees tend to be very irregular to the duty due to various reasons related to work and health issues.

According to the Dataquest survey (2004) whose results are disturbing, the call center ranked high for attrition due to health reasons for sleeping disorders 83% as compared to industry average of 39.5%, voice loss 8.5% as compared to industry average of 39.5% and other problems were ear problems (8.5%), digestive disorders (14.9%) and eye problems (10.6%).

**Health related problems of Call Center Agents**

Long hours of work, permanent night shifts, incredibly high work targets, loss of identity are those dark clouds that threaten to mar the ‘sunshine’ call center industry in
India (V.P.Sudhashree, et.al. 2005)\textsuperscript{186}. Due to the repetitive work nature and working during the graveyard time, most of the call center agents are being faced with various types of health issues. In the article titled ‘Human issues in call centers and BPO industry- a report’ by Sajeev Sharma (2007)\textsuperscript{150} he pointed out that call center agents working under tight deadlines are suffering from severe health problems like sleeping disorders, digestive system related disorders, depression, severe stomach related problems, eye sight problems and ear problems. In addition to the above health issues young agents drawing five digit salaries are also getting addicted to bad habits like, alcohol, smoking etc. In addition, discipline and behavioral issues like misuse of food, behaving erratically in vans and smoking in public places, misuse of telephones and other resources of the company. Few of the agents can be seen suffer from inter-personal problems like misunderstanding among the team members. As majority of the call center agents are in the age group of 20-30, few of the boys and girls fall in love quickly and in many cases unable to maintain healthy relationships fall prey to a broken relationship.

Luce & Juravich (2002)\textsuperscript{152} identified the general effects of stressors on the call centre agents. These effects have been presented in the table-4 given below. Knowledge about the causes of musculoskeletal symptoms has increased during the last few years. Today, we have extensive knowledge about the consequences of computerization in a work environment. Intensive and sedentary work with a computer is often associated with not only symptoms in the neck/shoulder and arm/hand region, eye discomfort but also to stress-related problems (Haavisto, 1997)\textsuperscript{187}(Hagberg, 1995,\textsuperscript{188} Karlqvist, 1998)\textsuperscript{189}. Several studies have shown that long periods of constrained sitting or computer work are associated with musculoskeletal symptoms (Buckle, 1994)\textsuperscript{190} (Hagberg, 1987)\textsuperscript{191},
In other studies a combination of non-optimal physical and psychosocial working conditions, has been shown to increase the prevalence of musculoskeletal symptoms.

Several other risk factors can be identified in the Call Center environment, e.g. static workload, repetitive movements, high demands and low control (Ferreira et al., 1997), Hocking, (1987) Sprigg, (2003). These factors may be involved in the development of musculoskeletal symptoms in the neck/shoulder and arm/hand region. Multifactor models suggest that work-related risk factors can result from the work tasks and their performance, as well as from the organization of work and the physical and psychosocial work environment. Additionally, individual and lifestyle factors could be risk factors for musculoskeletal symptoms (Hagberg et al., 1995). Plausible models supported by recent laboratory experimentation have provided support for an interactive relationship between physical and psychosocial risk factors in the workplace (Davis and Heaney, 2000, Lundberg and Melin, 2002).

Table No.4 List of health related problems because of stress among Call center agents

<table>
<thead>
<tr>
<th>S.No</th>
<th>Stress factors</th>
<th>Who report experience outcome “often”(or)”Regularly”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fatigue</td>
<td>55%</td>
</tr>
<tr>
<td>2</td>
<td>Irritability</td>
<td>48%</td>
</tr>
<tr>
<td>3</td>
<td>Inability to relax</td>
<td>47%</td>
</tr>
<tr>
<td>4</td>
<td>Headaches</td>
<td>44%</td>
</tr>
<tr>
<td>5</td>
<td>Backaches</td>
<td>44%</td>
</tr>
<tr>
<td>6</td>
<td>Vision problem</td>
<td>40%</td>
</tr>
<tr>
<td>7</td>
<td>Sleep problem</td>
<td>31%</td>
</tr>
<tr>
<td>8</td>
<td>Stomach problem</td>
<td>29%</td>
</tr>
<tr>
<td>9</td>
<td>Carpal tunnel/repetitive motion</td>
<td>26%</td>
</tr>
<tr>
<td>10</td>
<td>High blood pressure</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Hearing problems</td>
<td>17%</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>-----</td>
</tr>
<tr>
<td>12</td>
<td>Respiratory problems</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: A report on work life of call center representatives by Luce et. al.

Most of the studies have shown that pain in the neck-shoulder region is more common among women than among men. According to the 2001 work environment survey, 24.5 per cent of men and 40.4 per cent of women had pain in their neck-shoulder region every week. The differences seem only partly explainable by the gender-segregated labour market with a higher proportion of women in jobs where exposure to repetitive work is common, such as cashiers, telephone operators, hairdressers and cleaners (work Environment Authority and Statistics Sweden 2002).

**Stressors specific to Indian call centers**

Dataquest (India) conducted a BPO employee Survey in 2004. The survey focused on issues such as employee satisfaction and employee stress factors among other things. The survey results can be found in Dataquest (2004)\textsuperscript{154}, De (2004)\textsuperscript{155}. According to De (2004)\textsuperscript{155}, while 49% of the respondents said that they joined the industry because they were attracted by the salary, 54% said they would also quit because of the salary (i.e., because a better salary was offered by a competitor). While this may suggest that salary is the main motivation for the high attrition rates, it can be interpreted that the constant pull of higher salaries and the change resulting from that may actually be a symptom of a bigger problem. One related to the health of the BPO workers, most of whom are young college graduates. According to De, “Young English speaking Indians, who work in call centers in India, are exposed to a host of health problems. Because of the time difference between India and the US, the work for call center employees in India starts late in the evening and goes on till dawn. Such odd hours bring in a host of health...
problems including digestive issues, hair loss, back pain and stress. Some girls develop menstrual problems. Orthopedic problems and sharp increase in nicotine consumption are common features. The strain of assuming foreign accents not to mention personalities for long periods causes everything from sore throats to personality disorders. Though call centers in India claim that they try to make life better for the workers by improving the overall work environment, all said and done there is no alternative to a good night’s sleep.”

Another important problem that is beginning to manifest among call center workers in India is the stress resulting from having to deal with constant verbal abuse, mostly from anti-outsourcing elements, unemployed IT professionals in US or even racist thrill seekers who have reacted to the constant anti-outsourcing messages in the media that often paints a gloomy picture of white-collar job losers in the US due to the rise of BPO firms in India. Several instances of verbal abuse have been recorded in the media (Lakshmi, 2005)\textsuperscript{155}.

**Chapter summary**

Technological developments, such as information technology have helped organizations by delivering services of a kind and like to think of themselves as being “client-oriented” or “client-centered”. Call centers are organizations that are specifically dedicated to contacting client and customers e.g. help desk. These call center services can be classified into inbound and outbound services. The reasons for the burgeoning of the call center industry is its advantage in reducing costs and cutting staff, both of which can be accomplished by centralizing services, reducing branch offices close to customers and
taking advantage of lowest cost real estate and labour costs in locations outside main business centers.