There have been several studies related to stress. Very few of them have been conducted among workers involved in the process of Knowledge Process Outsourcing (KPO). The present paper provides empirical evidence to ascertain the work related stress among the employees across the knowledge process outsourcing in Chennai, Tamilnadu state. Data was obtained from 250 KPO's employees. Results indicate that stress does progressively increase or decrease with demographical background of the respondents as might be expected. Out of the 32 aspects of the stress examined with five parameters, it indicates that the middle age employees were registered high level of stress than the age respondents. Finally respondents were registered high level of stress for emotional, psychological, organisational, working environmental and behavioural stressors.

INTRODUCTION

The Outsourcing industry has been extensively researched in the past decade. Business Process Outsourcing (BPO) in particular has been the topic of many analyses. Outsourcing first appeared in the IT industry in the 1980s. This was the time when companies recognized the benefits of having IT service partners in order to develop complex systems, and enhance the way that a business process or service is managed (Schumacher, 2005). Since then, the outsourcing industry has gone through its introduction and growth phases, with growth rates of around 50%, and has reached its transformation stage. Increasing globalization and high pressure to innovate have substantially shortened the product and service life cycles. Industry life cycles have therefore become shorter and shorter - outsourcing is no exception. Over the past five years a new form of outsourcing has become popular and promises, as BPO once did, huge growth and profit potential.

Knowledge Process Outsourcing (KPO) is the next step up the outsourcing value chain. While BPO provides extensive process expertise, KPO is focused on creating, sharing, maintaining, tracking and disseminating of knowledge, is an outgrowth of the hugely successful BPO sector, creating, sharing, maintaining, tracking and disseminating of knowledge intensive industries by providing market and industry research, data and statistical analysis, competitive analysis, and support in legal and administration processes.

India, with its large pool of talented professionals and specialized domain workers, is quickly becoming the central hub for what is known as Knowledge Process Outsourcing (KPO). The KPO sector which involves the outsourcing of knowledge intensive services that deal with the creation, sharing, maintaining, tracking and disseminating of knowledge, is an outgrowth of the hugely successful BPO sector, of which India holds a large market share of nearly 70%.

Medical Research has shown that as much as 90 percent of illness, poor health and disease are stress-related. BPOs employees’ daily has experiencing “burnout” due to repetitive nature of work and unending nightshifts. The BPO services are ranked high for attrition due to health reasons, for sleeping disorders 83%, other problems were ear problems (8.5%), and eye sight problems (10.6%). Virtually saying none of the study was focused to know the stress faced by the Knowledge process outsourcing employees since these people is also a part of Business process out sourcing. Hence, this paper has made an attempt to study the stress faced by the KPO’s employees in Chennai Tamil Nadu.

ABOUT KNOWLEDGE PROCESS OUTSOURCING AND PROBLEM FOCUSED

Competitive knowledge is increasingly being outsourced to Knowledge Process Outsourcing (KPO) vendors, indicating a shift in the opinion that core business activities cannot be outsourced. According to a report by Global Sourcing Now, the Global Knowledge Process Outsourcing industry (KPO) is expected to reach USD 17 billion by 2010, of which USD 12 billion (almost 70%) would be outsourced to India alone. Indian KPO sector has already taken steps in employing highly educated and talented people and number of KPO professionals is expected to cross more than 250,000 by 2010 compared to the current figure of 25,000 employees. The graph on the right suggests that Expected Growth in Global BPO and KPO Markets (2003-2010)

However, KPO Workers experience various types of stressors affecting worker’s efficiency. Problems at work are more strongly associated with health complaints than any other problems. The KPO services are ranked high for attrition due to health reasons such as sleeping disorders, Voice loss, ear problems, Digestive disorders and eye sight problems. Hence, there is a need to study the work related stressors of the KOP’s in Chennai.

OBJECTIVES

1. To understand the work related stress across the employees of KPO services in Chennai.
2. To study psychological stressors across KPO service employees in Chennai.
3. To study Organisation related stressors across KPO service employees in Chennai.

RESEARCH METHODOLOGY

STUDY INSTRUMENT

Bunge (1987) employ the use of group interview in his study on stress management. This was found to be appropriate because of the interactive and transactional nature of the individual and the factor of stress. And its validity and reliability has been proven over the 30 years that it has been in use. Despite of the researchers has formulated a questionnaire which best suit the non western countries like India. It would consist of 32 items including personal questions. For measuring work related stress. Each questions well structured to obtain the objectives of the research. Respondents were asked to express the extent of their stress with each of the 32 items on a five point likert scale ranging from 1=strongly disagree to 5= strongly agree. The internal consistency of the translated questionnaire was 0.70, obtained using Cronbach’s alpha coefficient.

SAMPLE
The population for this study comprises KPO’s employees working in the TOP ten KPOs in Chennai during the study period. A total of 360 employees were randomly approached with 250 agreeing to take part in the study resulting in a response rate of 69%. The questionnaires were administered in an interview format to ensure as high a response rate as possible.

STATISTICAL METHODS

The statistical package for the social sciences (SPSS) version 16.0 was used to analyze the data collected. Analysis consisted of the computation of descriptive statistics in order to examine different work-related stress experienced by the respondents in the KPO’s.

ANALYSIS AND DISCUSSION

DEMOGRAPHICAL BACKGROUND OF THE RESPONDENTS

Age of the respondents shows that the highest 29.2% of the respondents were in the age range of 26 years to 30 years, 28.4% of them were below 25 years category, 22% of them come under the age range of 31 years to 35 years category and 20.4% of the respondents were in the age range of 36 years and above. This is finding from the study that the highest percentage of the respondents is fall under the 30 years age range therefore we conclude that this industry has attracted more youngsters. 52% of the respondents were male and 48% of the respondents were female. This industry had attract both age group the deviation is too little. 51.2% of the respondents were single and 48.8% of the respondents were married.

Education qualification of the respondents it shows that 32.8% of the respondents were post graduate, 30.8% of them were under graduate, 19.2% of them were professionally qualified, 7.2% of them were either Diploma or ITI and 10% of the respondents were Up to higher secondary qualified. This would found that this industry would give employment opportunity to all type of educated. The highest 38% of the respondents were earning income range Rs.25001 to Rs.25000, 21.6% of them were in the income range Rs.25001 to Rs.30000, 18.8% of the respondents were in the income range of Rs.30001 to Rs.35000, 12% of them were Rs.35001 and above income range and 9.6% of them were in the income range of Upto Rs.20000. It could understand from the above table that this industry had offer good salary above the butter and bread and stand of living.

Table 1 representing emotional stress level of the respondents towards the various facets tested were examines

1. I balance my physical and psychological tension. The highest 36.8% of the respondents were agree with the statement and 32.4% of them strongly agree,14% of the respondents disagree with the statement and 10.4% of them strongly disagree.

2. I discuss my problems with my friends when I am nervous. Of all, 65.2% of the respondents strongly agree with the statement, 10.4% of them strongly disagree and 4.8% of them disagree with the statement “I discuss my problems with my friends when I am nervous.”

3. I willingly participate with other people and create effective social life. Out of the total respondents 50% of them strongly agree that “I willingly participate with other people and create effective social life”, 20% of them agree with the statement, 10.4% of the respondents disagree and 10% of them strongly disagree with the statement.

4. I have self-confidence and self-esteem: 48% of the respondents strongly agree with “I have self-confidence and self-esteem”, 24.4% of them agree with the statement, 6% of the respondents disagree and 8% of them strongly disagree with the statement “I have self-confidence and self-esteem”.

5. I do create jovial relationship with others: The highest 54% of the respondents strongly agree with the statement “I do create jovial relationship with others”, 26% of them agree, 4.4% of the respondents disagree and 4.8% of the respondents strongly disagree with the statement.

Of all, 33.2% of the respondents strongly agree with “My thoughts are strengthened from my religious belief” 23.6% of them agree with the statement, 21.2% of the respondents disagree and 7.6% of them strongly disagree with the statement.

2. I devote few hours for my personal affairs: The highest 51.6% of the respondents strongly agree with the statement “I devote few hours for my personal affairs”, 15.6% of them agree, 18% of the respondents disagree with the statement “I devote few hours for my personal affairs”, 10.8% of them strongly disagree.

3. I visit temple or go on short visit to places to gain mental relaxation: Out of the total 45.2% of the respondents strongly agree with the statement, 17.6% of them agree, 14.4% of the respondents disagree with the statement “I visit temple or go on short visit to places to gain mental relaxation” and 8% of the respondents strongly disagree.

4. I do my job with more interest and high respect for my job: 49.2% of the respondents strongly agree that “I do my job with more interest and high respect for my job” 25.6% of them agree with the statement, 8% of the respondents disagree and 11.6% of them strongly disagree.

5. I am never depressed and feel guilt because of my denial, anxiety or fear: There 43.2% of the respondents strongly agree that “I am never depressed and feel guilt because of my denial, anxiety or fear”, 20.8% of them agree with the statement, 7.2% of them disagree and 14% of them strongly disagree with the statement.

STATISTICAL ANALYSIS AND ITS RESULTS

Hypothesis - 1
Null Hypothesis
H0: There is no significant relationship between the age of the respondents and their Emotional stressors

Results: The above hypothesis were tested with the help of one way ANOVA table and it disclose that the highest 10.82% of the respondents are highly stressful based on the mean value they fall in the age range of 26 years to 30 years, following which the respondents were in the age group up to 25 years having more stress its mean score is 10.74, the respondents were in the age range of 36 years and above, the One way table representing that the F value is 2.074 and P-value is (P > 0.05) therefore there is no significant relationship between age of the respondents and their feeling towards emotional stress are not significant. Hence the null hypothesis is rejected and research hypothesis is accepted.

DESCRIPTIVE STATISTICS

Stress level among the six dimensions of the stresses were registered, out of the total 176 respondents were highly stressful towards the emotional stressor, with regards to psychological stress 135 respondents were highly stressor which constitutes 54%, there are 132 respondents were highly stressful towards the organizational stressor, out of the total respondents 40.4% were highly stressful on working environmental stress, there are 36.8% of the respondents were highly stressful on behaviour related stressor and overall 60% of the respondents were representing high level of stressor.

CONCLUSION

Work stress is a real challenge for workers and their employing organisations. In everyday language, policy circles and across the social sciences, stress continues to demand attention. It is important that our workplace is being continuously monitored for stress problems. Further, it is not only important to identify stress problems and to deal with them but to promote healthy work and reduce harmful aspects of work. While this research has made an important contribution to the consideration of how to support KPOs employees to prevent and reduce work related stressors, further research is needed to explore the processes and behavioural change. Qualitative evidence gathered in the course of this study demonstrates that many KPOs employees partly receive the organisational support needed to embed the positive changes.
### Table 1
Showing the emotional stress level of the respondents

<table>
<thead>
<tr>
<th>S. No</th>
<th>Emotional stress</th>
<th>SA</th>
<th>A</th>
<th>NAND</th>
<th>DA</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I balance my physical and psychological tension.</td>
<td>81</td>
<td>92</td>
<td>16</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(32.4%)</td>
<td>(36.8%)</td>
<td>(6.4%)</td>
<td>(14%)</td>
<td>(10.4%)</td>
</tr>
<tr>
<td>2</td>
<td>I discuss my problems with my friends when I am nervous.</td>
<td>163</td>
<td>30</td>
<td>19</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(65.2%)</td>
<td>(12%)</td>
<td>(7.6%)</td>
<td>(4.8%)</td>
<td>(10.4%)</td>
</tr>
<tr>
<td>3</td>
<td>I willingly participate with other people and create effective social life.</td>
<td>125</td>
<td>50</td>
<td>24</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50%)</td>
<td>(20%)</td>
<td>(9.6%)</td>
<td>(10.4%)</td>
<td>(10%)</td>
</tr>
<tr>
<td>4</td>
<td>I have self-confidence and self-esteem.</td>
<td>120</td>
<td>61</td>
<td>34</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(48%)</td>
<td>(24.4%)</td>
<td>(13.6%)</td>
<td>(6%)</td>
<td>(8%)</td>
</tr>
<tr>
<td>5</td>
<td>I do create jovial relationship with others.</td>
<td>135</td>
<td>65</td>
<td>27</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(54%)</td>
<td>(26%)</td>
<td>(10.8%)</td>
<td>(4.4%)</td>
<td>(4.8%)</td>
</tr>
</tbody>
</table>

Source: Primary data

### Table 2
Psychological stress level of the respondents

<table>
<thead>
<tr>
<th>S. No</th>
<th>Psychological Stress</th>
<th>SA</th>
<th>A</th>
<th>NAND</th>
<th>DA</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My thoughts are strengthened from my religious belief.</td>
<td>83</td>
<td>59</td>
<td>36</td>
<td>53</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(33.2%)</td>
<td>(23.6%)</td>
<td>(14.4%)</td>
<td>(21.2%)</td>
<td>(7.6%)</td>
</tr>
<tr>
<td>2</td>
<td>I devote few hours for my personal affairs.</td>
<td>129</td>
<td>39</td>
<td>10</td>
<td>45</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(51.6%)</td>
<td>(15.6%)</td>
<td>(4%)</td>
<td>(18%)</td>
<td>(10.8%)</td>
</tr>
<tr>
<td>3</td>
<td>I visit temple or go on short visit to places to gain mental relaxation.</td>
<td>113</td>
<td>44</td>
<td>37</td>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(45.2%)</td>
<td>(17.6%)</td>
<td>(14.8%)</td>
<td>(14.4%)</td>
<td>(8%)</td>
</tr>
<tr>
<td>4</td>
<td>I do my job with more interest and high respect for my job.</td>
<td>123</td>
<td>64</td>
<td>14</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(49.2%)</td>
<td>(25.6%)</td>
<td>(5.6%)</td>
<td>(8%)</td>
<td>(11.6%)</td>
</tr>
<tr>
<td>5</td>
<td>I am never depressed and feel guilt because of my denial, anxiety or fear.</td>
<td>108</td>
<td>52</td>
<td>37</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(43.2%)</td>
<td>(20.8%)</td>
<td>(14.8%)</td>
<td>(7.2%)</td>
<td>(14%)</td>
</tr>
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</table>

Source: Primary data

References: