Comparative Analysis on Pervasiveness of Occupational Stress Among BPO/ITES Employees at Chennai and Puducherry Regions

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Abstract

The BPO/ITES industry regarded as the sunrise industry of our nation has revolutionized the Indian growth story in a spectacular manner. BPO promises to transform India economically much in the way as oil transformed the economies of West Asian countries. However, certain problems have cropped up in the process for which long-term solutions are necessary. Among them stress is the biggest challenge surfacing this sector - stress management nowadays is drawing more and more attention, particularly in the corporate context. Occupational stress has become a common and costly problem leaving a few workers untouched. This research paper is a study in this direction to empirically evaluate the prevalence of stress and also establish through a comparative analysis the distribution as well as differences in stress predictors in Chennai(metro city) and Puducherry (union territory), so that strategizing at macro as well as the micro environmental levels of this sector are enunciated to keep the stress levels under control which is very critical for this growing industry amidst the other competitive pressures it has to bear else it will dig a grave for itself.

Key words: BPO, ITES, Occupational Stress, Exhaustion, Physical work environment, Domestic BPO.

INTRODUCTION

India crowned by businesses around the globe as the world's back office, employs 350,000 people in the outsourcing industry, adding another 1,50,000 new jobs every 12 months. One can only imagine them all stuffed in a single cubicle clonking phones together and we begin to approximate the situation. A company that outsources is virtually working 24 hours catering efficiently to its customers anytime in any part of the world. To enable them working 24 hours countries like India, Philippines, Srilanka, China etc. work diligently during the days and nights and ensure better service. It is here that there is a concern regarding issues of health and safety that are unique to this new and developing industry. Elevated stress levels, shift duties, high work targets, lofty income may force many towards addictions to keep them going. As people with basic minimum qualification and good communication skills are getting in the BPO industry, gaining exposure to the westernized working environment and at the same time affecting the Indian way of living in various aspects such as physical, social, cultural and thereby leading to various problems amidst good pay, perks, fast lifestyle etc. Several researches have drawn their interest towards the physical, psychological and social stress faced by these employees and their revelations are astounding.

Over the last few years, India's US \$ 14 billion BPO industry seemed to have been losing battle

with the rising expenses. Real estate prices were spiraling out of control. As the cost of city living did not make it worth the move for many and family ties held some back the BPO/ITES started to look at Chennai and the tier 2 and tier 3 cities. These BPO's have been a boon to many in these areas but we see that most of the youngsters are burning out their formative years as "cyber coolies". Recent studies have shown the working condition in Indian BPO's to be stressed and there is much of labor exploitation. This necessitates the researcher to undertake this present study in the areas of Chennai and Puducherry where a large number of BPO/ITES companies have set up or are looking at setting up their base due to the unique advantages provided by each of these locations. As the earlier BPO's have been concentrated in National Capital Region (comprising of Delhi, Noida and Gurgoan), Bangalore and Mumbai, it is the need of the hour to study the stress factors of the BPO employees working in the upcoming areas like Chennai and Puducherry that are covered by the present study and to identify the necessary interventions.

Further in an era where the service sector is gaining significance, the value of the individual employee has increased more than ever before. Employees with specialized skills are the focal point and on whose well being and performance the productivity of a company rests. In a highly competitive corporate environment, companies cannot afford the absence of their employees due to sickness/ poor health, caused by a sedentary lifestyle, etc as a reason for poor performance at the workplace.

Stress management in modern organizations has become a growing problem over the last decade. Stress related illness and health problems are on the increase in every organization and talked more loudly in the BPO/ITES sector. The researcher finds that literature review reveals that "stress" – costs the economy substantially

more than industrial injury and more than industrial strikes. However there is paucity of research on causal and effect of stress and the measures adopted to combat occupational stress of employees in BPO organizations especially in the regions of Chennai and Puducherry. So the present study will be of immense use for the industry and the policy makers as the industry shines across the areas surveyed.

Statement of the Problem

Today outsourcing as a business strategy has produced tremendous gains to organizations that have been able to streamline the process over years of experience. In the present industrial and economic scenario Business Process Outsourcing (BPO) is a valuable strategy for companies seeking new ways to achieve high performance by controlling costs, reducing risk, fostering collaboration and increasing transparency.

Today in spite of the global recession, the growing domestic market has lead to a paradigm shift in the BPO/ITES sector. The domestic BPO segment is expected to grow by 16.9% to reach INR 127 billion driven by the demand from voice based services and other emerging verticals. Until a few years ago domestic BPO was looked upon as the poor cousin of its international counterpart. The industry is also seeing more organized players in the domestic BPO/ITES segment who apart from exporting these services are catering to more of the Indian companies who are also outsourcing their back office operations like Human Resources, Accounting, Customer Interaction Services and the like. Coupled to this the rising power and real estate costs in most metros are attracting these BPO's to set up their offices in places like Chennai and other tier 2 and tier 3 destinations to leverage on cost efficiency. This would mean people with minimum qualification and basic communication skills in English or knowledge of vernacular language will be in high demand.

Hence in the name of operational efficiency the work force in the BPO organisations must also be protected from exploitation by these companies as there already is a growing concern regarding issues of health and stress that are unique to this new and developing industry. Further there is lack of reliable and relevant information on which to base the response to this concern and this poses a challenge for safeguarding the health of the BPO/ITES employees who suffer from the industries high rating of occupational stress in spite of the glamour in it to which our youth are losing out as 50% of these employees are below 25 years.

Further organizations today strive to augment job satisfaction among its workforce, as it is conducive to lower employee turnover, higher engagement and greater productivity. Stress being a dominant factor in the BPO/ITES industry hinders job satisfaction and work life balance. In this regard this study assumes immense importance.

Literature Review

The literature review identifies that the earliest references to stress was restricted only to the field of medicine. Physiologist, Walter Canon (1914), had used the term stress to describe emotional states that had detrimental physical results on organisms. Hans Seyles(1946) is generally considered the first major contributor on stress as an exclusive phenomenon. Sutherland & Cooper (2000) in their article explain that the physical work environment comprising of factors such as lighting, vibration, temperature and ventilation, hygiene and physical hazards can be source of stress, and it is the subjective relativity to these factors that is more important than the objective measures leading some to comment. His article brings out the other potential sources of stressors like uncomfortable temperatures and humidity, unclean, disorderly workplaces and rest rooms, physical hazards and psychological trauma due to the danger inherent in the job, aggressive and violent clients in customer services can be sources of stress and fatigue that need to be addressed. Radha R. Sharma (2006) in his work had analysed the macro and micro HR issues confronting organisations engaged in globally distributed work. He has found that these impact not only the work and organizational productivity but also the people delivering that work and, therefore, need to be addressed adequately for the benefit of all its stakeholders. He also highlights there is paucity of empirical work on this emerging field, Resheeda Bhagat (2009) studies how BPO in Tirupati town has proved to be a magnet for youngsters from the surrounding villages for whom the job is turning out to be a life changing experience. This article helps us to take a look at how the rural women employees at the BPO have gained confidence and dismiss the question of marriage and indicate that a steady job and economic empowerment are more precious to them. The rural BPO has come as a remedy as the cost of infrastructure, rentals and so on are sky rocketing in the metros...

Revathy L.N., (2009) has discussed about the huge untapped opportunity the Indian BPO segment is facing, even though it is charting strong year - on- year growth. Added to this the domestic BPO market is expected to reach \$6 billion by 2012 with a maximum addressable opportunity of \$16-\$19 billion as per the Ernst & Young reports further many studies in this line note that domestic service providers would move to tier II and III cities to tap additional resources at low cost to serve domestic clients. Even though the profit margins are less by about 30-50% compared to the international market. It is however predicted that the domestic BPO market will increase from around 9% in 2008 to 11-12% in the year 2012. Anjali Parayag (2010) justifies that the rural BPO in India has come of age but this initiative may take time to mature. She quotes that some companies like WIPRO

have about 6% of their revenues not just in India, but including their operations in the rest of the world come from the domestic BPO market. The Indian customers so far who were cost driven are also looking at International quality delivery. The author clearly depicts that domestic or rural BPO is coming of age in India.

The literature review clearly indicates the growing BPO jobs contributing to stress on one hand while the cost competition in the sector is increasingly favouring the growth of domestic and rural BPO's. Further there is paucity of studies on stress in southern regions. Hence this study will focus on Chennai and Puducherry regions and will also give a comparative account of the impact of BPO's on the stress levels of employees in these regions.

Objectives of the study

In the interest of the BPO employees, the government of India and our society at large, as this sector is playing an important role in the economy of our country and generating employment opportunities, it is necessary to validate the stress levels and factors influencing it else it will dig a grave for itself amidst the prosperity that it promises to our economy. Hence the present study examines stress related factors in the BPO/ITES sector and investigates them through the primary data collected exclusively for the study from the regions of Chennai & Puducherry and suggests strategies to cope with occupational stress effectively and efficiently.

The objectives proposed for the study are as follows:

- To determine the existence of stress and its pervasiveness among the BPO/ITES employees in Chennai & Puducherry regions.
- To suggest strategies to cope with occupational stress of BPO/ITES employees.

Methodology of the study

Research Design: The research is categorized as descriptive research as it tries to describe the state of affairs or problems as they exist and are faced at present by the BPO employees in the areas surveyed. The study was conducted using a well structured questionnaire and fact finding measures of various kinds like focus group discussion, telephonic and mail interviews. Both primary and secondary data was used. Secondary sources included collecting data by visiting libraries and searching various closed and open access journals on inflibnet.

Sample Design

Universe Type: Finite

Sampling Design Type: Convenience Sampling – 300 BPO executives on the shop floor were surveyed – 119 from Puducherry and 181 from Chennai region. The researcher selected the companies on the basis of the number of employees not less than 200 as on December 2009. Further the BPO's in Puducherry were more of pure play than of the other types. Approximately about 13% of the population was included in the study.

Sampling Unit: Chennai and Pondicherry Region

Selected Sample: Wipro, TCS, Rapid Care, Acusis, Sutherland, Integra, RBS, Sparsh, Mphasis, SPI Technologies Ltd. and IBM.

Sample Size: 300 employees of ITES / BPO companies were selected as sample units

Findings & Discussion

Analysis of stress levels among BPO /ITES employees

The questionnaire included items of the shortened version of the stress scale developed by Srivatsava & Singh (1981) and the instruments used to measure role stressors prepared by Udai Pareek (1984) was consulted to measure stress levels. The exhaustion scale was developed by Surana & Singh (2007). It

also considered the scales adapted from Ayala Pines & Elliot Arson, while WLB scale and the dissatisfiers scale were developed by the researcher for the present study. It included items like "I have sufficient time to spend for my family". The respondents were asked to rate different items using a 5-point Likert scale where 5 indicated "always" and 1 represented "never".

From the study we see that majority of the respondents experienced tension and hence it is ranked as the first symptom observed. The second symptom prevalent is stress and other symptoms experienced in their descending order of observations/ experiences are tiredness, irritability, trouble to sleep, inability to cope, pains and trembling, pounding heart and breathing problems. This only gives an indication that there is prevalence of stress symptoms at the BPO/ITES work environment among their employees surveyed. Further this implies that the existence of these symptoms will lead to occupational stress and work exhaustion.

The study also evidently states that an overwhelming majority of the respondents 45% have cited stress as the major reason for quitting BPO job, the next reason of concern for quitting is the bad quality of work life by about 28% of the respondents, 17% say lack of career opportunities as a concern for leaving the BPO job and about 10% only complain that the pay being low is the reason for quitting the BPO/ ITES sector job. Hence stress seems to be an indisputable factor influencing the high attrition rate in this industry.

Comparison of the demographic profiles in the 2 regions

A comparison of the distribution of major demographic variables in the 2 regions gives us a highlight of the contrasting differences in the profiles of the employees employed in the study areas.

Income Group distribution city wise

Table 1-Income Group *City Cross

Tabulation

	C	Total	
	Chennai	Puducherry	
Income Group < Rs.10,000	4	78	82
>Rs.10,000 & < Rs.20,000	90	41	131
> Rs.20,000	87	0	87
Total	181	119	300

A cross tabulation of city wise income distribution showcases the reality and we see that lower income is paid for the BPO jobs in Puducherry when compared to the same job in Chennai. It is observed that a majority of the respondents in the Puducherry region earn < Rs.10, 000 while a majority of respondents in the Chennai region earn >Rs. 10,000 and >Rs.20,000 .

Further on applying Chi square test, the study infers that Chi square (2) = 1.664E2, P=0.000 and hence statistically there is a significant association between the Income distribution of the respondents employed in the 2 regions. Further Phi Value =0.745, showing the association is very strong. This implies that there is a wide income discrepancy being followed for the employees in these regions. This is a cause for concern as many BPO's are looking at smaller towns for cost cutting and to leverage upon the lower real estate costs.

Age group distribution city wise Table 2 - Age group * City

Age group	City		Total
	Chennai	Puducherry	
Age 20-25 yrs.	42	71	113
25-30 yrs.	83	33	116
30-35 yrs.	56	15	71
Total	181	119	300

The table 2 depicts the age groups distribution in the 2 cities and we observe that 116/300 -38.7% are in the 25-30 age and also maximum of this age group is represented by the BPO employees from Chennai, 113/300 - 37.7% are in the 20-25 age group and also a maximum of this age group is represented by employees from Puducherry region, another 71/300 – 23.6% are in the 30-35 age group and a maximum of this group is in Chennai region. Applying Chi square test we see that chi square (2) = 41.635, P = .000 and hence there is statistically significant association in the age groups distributed city wise. This means different age groups are not equally distributed in the 2 cities. The study shows that Puducherry region has employees in the 20-25 age group more while Chennai has more employees in the 25-30 and 30-35 age groups. Further Phi value shows the association between these two variables as Phi = .373.

Education distribution city wise

A study of the distribution of the education profile of the BPO/ITES employees surveyed shows that about 160/300-53.3% of the respondents had UG degree and also a maximum of this education group was seen in Puducherry, about 112/300-37.3% of the respondents had PG qualification and a maximum of this group was seen in Chennai region. Around 19/300-6.4% were ITI/diploma holders and 9/300-3% were +2 qualified.

Applying chi square to check if there is any significant association in the distribution of education city wise , the researcher observes from table 6.15.1 that chi square (3) = 23.183 , P=.000 and hence the study can conclude that there is statistically significant association between the distribution of education profile of respondents city wise.

Further a look at Phi value shows that Phi = .278 which shows the strength of the association. This is another area of concern as the young are drawn into the sector, the number

of students pursuing higher studies as well as taking up research work will steadily decline. This would make our country an adopter of technology rather than an innovator.

Distribution of Experience city wise

The distribution of experience city wise shows that 107/300 - 35.7% have about 3-6 yrs of experience and also a maximum of work force with this experience were seen in Chennai region, about 106/300 - 35.3% have about 1-3 years of experience and this group is seen more in Puducherry region, about 53/300 - 17.7% have 6-10 yrs of experience and 34/300 - 11.3% have > 10 yrs.

Further the present study shows that a larger proportion of various experiences were seen in Chennai and more of the respondents in Puducherry were having less years of work experience in this industry. The phi value shows the strength of the association as equal to .408.

Extent of feeling refreshed at the beginning of the day

Though the study observes that 50 % of the employees do feel refreshed another 50% do not feel refreshed at the beginning of the day. This is a cause of concern and the respondents in the two cities had ranked that work related stress is the major reason for not feeling refreshed in the beginning of the day. The others in the descending order of importance were health reasons, physical work environment, and family / relationship issues and then debt. In order to analyze this data further to check if there are any significant differences between mean rankings of these variables in the two cities, independent samples t test was used.

HYPOTHESIS PROPOSED

H0: There is statistically no significant difference in the mean rankings of the reasons for not feeling refreshed in the two cities.

Table 3 - Group Statistics for reasons for not refreshed * City

	City	N	Mean	Std. Deviation	Std. Error Mean
Work related stress	Chennai	63	2.16	1.461	.184
	Puducherry	53	1.87	1.415	.194
Family / relationship issues	Chennai	63	3.05	1.325	.167
	Puducherry	53	3.30	1.030	.141
Health reasons	Chennai	63	2.78	.958	.121
	Puducherry	53	2.96	1.255	.172
Debt	Chennai	63	3.92	1.286	.162
	Puducherry	53	4.51	1.103	.151
Physical work environment	Chennai	63	2.95	1.497	.189
	Puducherry	53	3.09	1.197	.164

(Source: Computed)

From the above table on descriptive statistics for the 2 cities on the reasons for not feeling refreshed, we see that

- Mean of family/relationship issues, health reasons, debt and physical work environment are higher in Puducherry than in Chennai region.
- Mean of work related stress is higher in Chennai than in Puducherry region

Finally from the results of the independent samples test - the researcher concludes that since P is greater than .05 in the cases of work related stress, family/relationship issues, health reasons and physical work environment the H0 is accepted and there are no significant differences in their mean values between the two cities. But in the case of debt we see that t(114) = -2.654 , P =0.009, hence there is statistically significant difference in the mean ranking of debt in the two cities and a look at the group statistics table indicates that the mean ranking in Puducherry is lower for debt when compared to Chennai region. This implies that the BPO/ITES respondents of Chennai region have a higher debt pressure when compared to

the respondents in Puducherry region. This is basically because of the high cost of living in metros than in Tier 2 cities.

Distribution of Periodic Medical Examination city wise

Applying the chi square test to check there is association between city and periodic medical examination undertaken, the researcher observes that Chi square test (2) =2.169, P=0.338 and hence the study shows that P value is not below the magic 0.05 and the study can conclude there is statistically no significant association between city and periodic medical examination undertaken by the respondents in the two cities surveyed.

Distribution of worry about financial position city wise

The study shows that 44% say they worry about financial position, 32% worry sometimes only while 24% have said they have no worries about their financial positions. To check if there are any significant association in their worry about financial position with respect to their cities, Chi square test was applied.

Worry about financial position and experience of stress

To check if there is any association between worry about financial position and the extent stress experienced by the respondents' one way ANOVA test was applied.

Table 6.31.1 ANOVA Worry about financial position * Experience Stress

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.109	2	10.554	12.558	.000
Within Groups	249.611	297	.840		
Total	270.720	299			

(Source: Computed)

By studying the ANOVA results generated by SPSS, the significance is .000 and it is lower than .05. Hence there is statistically significant association between worry about financial position and experience of stress. This further can be justified from the Duncan table and the mean plot that those who are stressed show more worry about their financial position.

Stressexp

Duncan

Worry about		Subset for alpha=0.05		
financial position	N	1	2	
No	72	2.31		
Yes	132		2.83	
Sometimes	96		3.00	
Sig.		1.000	.213	

Means for groups in homogeneous subsets are displayed.

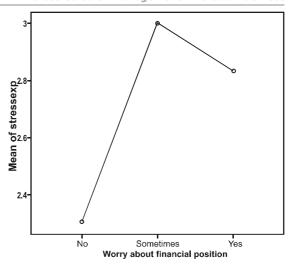


Fig: 1 – Mean plot of Worry about financial position * stress experienced

Further it is said by stress healers that continual feeling of being financially insecure nibbles painfully at our lower back. In fact psychologists suggest that back pain is experienced while say, heaving a heavy object, the injury occurs only because the back muscles are already contracted due to emotions, predisposing them to injury.

Distribution of sleep disturbances and its impact among the respondents between the 2 Cities

The study showed that there is significant differences in the mean values on sleep disturbances between the two cities in the variables trouble to fall asleep and awake and planning for the next day. On studying the descriptive statistics we see that the mean values for these two variables are experienced higher in the city of Puducherry than in the city of Chennai. This signifies the fact that BPO/ITES respondents are being loaded more in their workplace than their counterparts in the city of Chennai.

Comparison of the mean experience of stress symptoms in the cities of Chennai and Puducherry

An analysis of the stress symptoms between the 2 cities concluded that there are no significant differences in the variances of the variables tension, irritability, inability to cope, excessive tiredness, trouble falling asleep, anxiety and pounding heart there is no significant difference in the experience of stress symptoms between the two cities.

- While in the case of experience breathing problems and experience pains and trembling the values are t (217) = -2.846, P = .005and t (212) = 5.336, P = .000 and hence H0 is rejected and we conclude that there is significant difference in the experience of stress symptoms in the two cities. Further from the group statistics we observe that the experience of these 2 problems is higher in Puducherry region than in Chennai region. This implies that the BPO/ITES workers are more strained in Puducherry in comparison to Chennai city. This can be justified by the fact according to NLI paper that "the workers are subject to a work regime, which is based on a high degree of computer -telephony integration. The system also allows management to examine the performance of the employees quantitatively - average call time, number of calls and so on" coupled with this are the high targets and the work environments at Puducherry being nothing more than "modern sweat shops" than in Chennai city.
- The results of the independent samples test and the study concludes that in the case of experience being tired, experience susceptible to illness and physically exhausted there is statistically no significant difference but in the case of being emotionally exhausted t (298) = -4.188, P =

.000 and hence there is statistically significant difference in the experience of being emotionally exhausted between the cities. The descriptive statistics shows that BPO respondents in Puducherry experience emotional exhaustion sometimes while the respondents in Chennai experience it rarely. This again justifies that BPO employee in Puducherry experience much higher targets and also their work environments are highly formal and face more quantity/quality targets and hence this increasing experience of emotional exhaustion.

Analysis of the stress reducing strategies

It is clear that the various common relaxation measures are not being carried out to the same extent in the companies surveyed. By using weighted average method we observe that relaxation measures very widely practiced is team get together and the others in the descending order of importance are sports activities and family get together at rank 2, stress management training at rank 4, general counseling at rank 6 and lastly followed by yoga and meditation. This indicates that the relaxation programme are not widely and frequently followed in the BPO/ITES companies surveyed.

Further a study on the relaxation facilities offered at the two cities makes it picture clear that the relaxation facilities like indoor activities, news desk, canteen TV, contests gym, health experts are comparatively available to a lesser extent in Puducherry town than in Chennai city.

We can thus infer the effects of cost cutting measures that corporate adhere to leverage on the benefits of outsourcing to cities other than metros.

Suggestions: Holistic approach to relieve stress: The yogic concept of health and disease enables us to understand that many causes of physical and psychosomatic disorders are rooted

in the mind. A control over mind is indeed the solution to rip off the evil called stress.

Concept of service desk: A big problem causing tension to the employees is to have paid their utility bills on time and avoiding the possible inconveniences thereafter. This can be handled by maintaining a service desk where the utility bills can be queued up and payments made after a logistics planning.

The other suggestions are: providing unbiased career growth opportunities, establish an in house day care centre, robust career counseling, daily department huddle, industry specific guidelines has to be enunciated, health risk assessments both for pre-employment and periodic for employees should be conducted to rip the evils of stress in its bud, awareness of lifestyle diseases should be created, increasing the length and frequency of the breaks, organize relaxation courses like art classes as it is a big stress buster, have laughter clubs as it is the best medicine, provide an ergonomically designed work place, need for mental revolution among the employees, need to include BPO into the curriculum of the various courses to help people to choose it as a career by choice and not being trapped. This will also increase the productivity of our country in the various sectors.

Scope for future research

As this study is limited only to the regions of Chennai and Puducherry, in the future it can be conducted in the other BPO/ITES destinations in Tamil Nadu as well as the other southern states of India so that strategizing at the macro level by the policy makers can be initiated.

Conclusion

The study brings to fore the prevalence of stress symptoms and also numerous work situations that groom stress and make these BPO/ITES employees very easily vulnerable to stress related disasters which may be physical,

psychological, social cultural as well as economic disturbances. These disturbances are more pronounced in the tier 2 cities than in the metros as companies struggle to keep their profit margins in the context of rising global competition for outsourcing. This will have negative influence not only on our work force but also on our country at large. Further as the competition for outsourcing is spinning large from other countries like China, Africa etc. coupled with the recent global recession - it is here that this study highlights the rising stress levels among this work force which may be subject to more quantitative as well as qualitative pressures of the industry. Hence this work calls for the attention of the industry as well as the government to regulate the work environment in this sector else it would dig a silent grave in our economic development.

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