

A Study of Health Problems of Working Women in BPO sector in Delhi and NCR

Dr. S.S. Sarangdevot*
Dr. Rakesh Kumar Sharma**
Prof. Rajender Kumar Yadav***

Abstract

The participation of women in BPO industry has been seen as a critical enabling factor for continued growth of the industry. Today, BPO companies are recognizing women on board at all levels and this helps the organization to make good business sense. Therefore BPO companies are trying to develop and involve women for higher roles and functions. Today women play a vital role in Indian BPO sector. According to a survey out of 400 million of workforce in India, around 30-40 percent is females. But there are various problems which are faced by working women in these organisations. A health problem is one of them. There are various reasons for these problems, viz., long working hours, night shifts, mental pressure, etc. The present study examines all these problems as faced by working women in BPO units in Delhi & NCR. This study concluded to know that how different health problems contribute to attrition.

Keywords: BPO-Business Process Outsourcing, KPO-Knowledge Process Outsourcing, ANOVA-Analysis of Variance

1. Introduction

India has a vast educated English-speaking workforce with computer skills; indeed, it is estimated that over 167,000 engineering students and approximately 1.5 million graduates are added each year to this young workforce (Phukan, 2003). Low operating and labour costs and a favourable policy environment are other factors that have contributed to the popularity of India as an outsourcing destination. As a result, numerous new employment opportunities have been created for educated young people, including fresh college graduates and post-graduates. It is estimated that in 2007-08, the information technology-BPO industry will provide direct employment to 2 million people in the country (GOI, Department of Information and Technology, nd).

Women especially in India have found out that, the wages that they earn through a BPO job help them to experience freedom and autonomy. In India, the women mobility has always been controlled by men even in case of highly educated and independent women. According to a study carried on call centre workers in India, it has been found that women are happy to learn new skills and have learnt to become more assertive.

*Deptt. of CS and IT, Rajasthan Vidyapeeth (Deemed) University, Udiapur (Raj.), India

**Dept. of Accounting & Finance, University of Petroleum & Energy Studies, Dehradun, India

***Global Institute of Technology & Management, Gurgaon, Haryana, India

The interpersonal skills of women are now being recognized and valued in call centres. In most of the call centres, a premium is attached to women's voice and interpersonal skills. This is because the quality of customer care jobs ultimately helps a company to gain huge profits. The exact number of women working in Indian BPO's is not exactly known but the development of IT industry in India had a clear impact on emancipation of women.

There is no doubt that technology itself is gendered and is strongly shaped by the patriarchal yardstick of class and gender. Despite all these the most important issue is to restore and carry forward the empowered participation of women in the development of technology and enhance the participation of women through skills, education and creative knowledge. The Indian BPO industry has set high standards in gender inclusivity. Today, women play a vital role as the part of the BPO workforce. It has been suggested that the professional skills of women needs to upgrade therefore a number of mentorship programs are being organized. (Ivana, Lewis-2010)

Review of Existing Literature

The success story of India's booming outsourcing industry may soon be eclipsed by critical problems plaguing the BPO space that include heart disease, depression, sleep disorders, and family discord, and warn industry experts and doctors. The BPO industry employs over 1.6 million young- men and women in the country. The sedentary lifestyles, coupled with long hours and stressful working conditions make them more vulnerable than others to heart disease, digestive problems, sleep disorders, weight gain, depression and other psychological disorders. IDC and Dataquest magazine recently conducted a survey of 1,749 employees across 19 outsourcing companies, and they found that nearly 32 percent of employees complained of sleep disorders; 25 percent had digestive problems; and 20 percent suffered eyesight problems (Techtree News Staff-2007).

The BPO sector has opened up vast career opportunities for young adults, but at the same time employment in the sector has had an impact on young people's lives. For example, several young BPO employees have had to relocate to outsourcing hubs and live independently. With the availability of higher disposable incomes, many young people have reported lifestyle changes. Indeed, among financially independent youth there has been a visible move towards consumerism (Phukan, 2006).

While employment in the BPO sector has meant that young adults are reaching their career milestones and financial goals much earlier than before, surveys and anecdotal evidence show that workers in the BPO sector experience high levels of stress as a result of working in closely monitored environments with pressure to meet ambitious performance targets. Strict deadlines and ambitious targets have also resulted in employee "burnout". Repetitive tasks, such as responding to telephone calls more than 100 times a shift have resulted in absenteeism and attrition among many young employees (Sharma, n.d.).

According to a survey of BPO employees, several factors were considered to cause stress at work including travel time, changing duty shifts, insufficient holidays, work pressure and long working hours (www.livemint.com). Moreover, as many

BPOs provide services to countries overseas, employees in the sector are trained to understand the culture and accent of these countries; in some cases, employees are required to use a different name, speak in a foreign accent and adopt a different persona at work, which may result in anxiety and related disorders (Pradhan and Abraham, 2005).

Objective of the study

Following are the main objective of this study:

1. To know the various health problems faced by working women in BPO units in Delhi and NCR
2. To identify major health problems which result high attrition in BPO units.

Research Design

Research design is the plan, structure and strategy of investigation conceived, so as to obtain answers to research questions and to control variance. The study was based on stratified random sampling. The design of research used was exploratory, empirical and analytical in nature. This study examined the various health problems faced by women employees in selected BPO units in National Capital Region (NCR) and how these health problems contribute to high attrition. In the present study, data obtained from target respondents had been placed in tabular form than this information had been analyzed with some specific statistical tools. ANOVA technique of hypothesis testing had also been used to know the significant difference in the opinion of respondents in regard to health problems and their impact on attrition.

Hypothesis

Hypothesis testing and begins with an assumption called a hypothesis that we make about a population parameter. It is a supposition made as a basis for reasoning. Following was the hypothesis tested in this research:

- Different causative factors have no varying effects on the attrition rate of women employees and they harbor more preventive health disorders.

Data Collection

Data had been collected from the structured questionnaire from target respondents. The following methods had been used to contact the respondents:

- Mail Questionnaire
- Telephonic Interview
- Personal Interview
- Online interview

Analysis & Interpretation

Following inferences were drawn based on the responses of different women employees of BPOs in NCR:

Table 1.1: Effects on Employees' Health by Working in BPOs

		Frequency	Percent	Valid Percent
Valid	Yes	188	94.0	94.0
	No	12	6.0	6.0
	Total	200	100.0	100.0

(Source: Primary Probe)

Table 1.1 exhibits the cause and effect relationship between working in BPO and the employee's health of women employees. 94% respondents opined that working in BPOs either in one way or the other affects the health of women employees. Only 6% have denied this fact. The 94% might have experienced these affects and the remaining 6% may experience it at later stage of life.

Table 1.2 : Health Problems Experienced in a BPO

Health Problems		Levels of effect on health						Total	Mean	S.D	C.V
		5*	4*	3*	2*	1*	6*				
Fatigue	Count	71	57	43	17	1	11	200			
	% within attributes	35.50%	28.50%	21.50%	8.50%	0.50%	5.50%	100.00%	4.06	1.085	26.72
Backache	Count	62	80	30	15	1	12	200			
	% within attributes	31.00%	40.00%	15.00%	7.50%	0.50%	6.00%	100.00%	4.12	1.018	24.70
Spondylosis	Count	37	58	57	21	16	11	200			
	% within attributes	18.50%	29.00%	28.50%	10.50%	8.00%	5.50%	100.00%	3.56	1.282	36.01
Digestive disorders	Count	11	45	87	43	2	12	200			
	% within attributes	5.50%	22.50%	43.50%	21.50%	1.00%	6.00%	100.00%	3.92	1.113	28.39
Sleep difficulties	Count	82	69	27	2	0	20	200			
	% within attributes	41.00%	34.50%	13.50%	1.00%	0.00%	10.00%	100.00%	4.23	1.078	25.48
Respiratory disorders	Count	0	11	85	24	61	19	200			
	% within attributes	0.00%	5.50%	42.50%	12.00%	30.50%	9.50%	100.00%	2.61	1.452	55.63
High blood pressure	Count	1	44	52	22	66	15	200			
	% within attributes	0.50%	22.00%	26.00%	11.00%	33.00%	7.50%	100.00%	2.68	1.502	56.84
Diabetes	Count	0	2	44	35	102	17	200			
	% within attributes	0.00%	1.00%	22.00%	17.50%	51.00%	8.50%	100.00%	2.07	1.461	70.57
Sprains and strains	Count	7	32	58	31	60	12	200			
	% within attributes	3.50%	16.00%	29.00%	15.50%	30.00%	6.00%	100.00%	2.66	1.44	54.13
Frequent cold and headache	Count	26	63	40	27	32	12	200			
	% within attributes	13.00%	31.50%	20.00%	13.50%	16.00%	6.00%	100.00%	3.30	1.439	43.60
Irritable menstrual cycles	Count	21	52	63	19	34	11	200			
	% within attributes	10.50%	26.00%	31.50%	9.50%	17.00%	5.50%	100.00%	3.20	1.385	43.28

Imbalance in biological system (reversed physiological clock)	Count	30	62	35	28	34	11	200			
	% within attributes	15.00%	31.00%	17.50%	14.00%	17.00%	5.50%	100.00%	3.30	1.466	44.42
Others (please specify)	Count	0	0	0	0	9	191	200			
	% within attributes	0.00%	0.00%	0.00%	0.00%	4.50%	95.50%	100.00%	0.04	0.208	5.2

1*= Not All Affected, 2*= Unaffected, 3*= Neither Affected Nor Unaffected, 4*= Affected, 5*= Seriously Affected
(Source: Primary Probe)

Table 1.2 enlists various problems faced by the Women employees in a BPO

The major problem faced by women in a BPO is that of sleep difficulties scoring high with 75.50% on the affecting scale and also having the highest mean of 4.23 whereas its CV is the lowest with respect to other problems 25.48%.

Following the sleep difficulties is the backache problem with 71% of affecting scale and a mean of 4.12, CV of 24.70%.

Problems like fatigue, spondylosis, and imbalance in biological

system and frequent cold and headache also affects the BPO women employees severely elucidated by the stats 64%, 47.50%, 46% and 44.50% respectively.

Health problems like irritable menstrual cycles, digestive disorders, high blood pressure, sprains and strains affects moderately with respective percentage of 36.50%, 28%, 22.50%,19.50%

Diabetes and respiratory disorders affects minimum with a scale of 1% and 5.50% with reference to other factors.

Table 1.3: Various Health Problems and Attrition

Descriptives									
Health problems	Importance	Number	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Seriousness of effect on health-Fatigue	Least Important	2	3.00	1.414	1.000	-9.71	15.71	2	4
	Unimportant	3	5.00	.000	.000	5.00	5.00	5	5
	Neither Important Nor Least important	46	3.57	1.025	.151	3.26	3.87	2	6
	Important	78	4.01	1.134	.128	3.76	4.27	2	6
	Very Important	71	4.44	.922	.109	4.22	4.65	1	6
	Total	200	4.06	1.085	.077	3.91	4.22	1	6
Seriousness of effect on health-Backache	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	5.00	.000	.000	5.00	5.00	5	5
	Neither Important Nor Least important	46	3.85	.942	.139	3.57	4.13	2	6
	Important	78	4.35	.835	.095	4.16	4.53	1	6
	Very Important	71	4.06	1.157	.137	3.78	4.33	2	6
	Total	200	4.12	1.018	.072	3.97	4.26	1	6

Seriousness of effect on health-Spondylosis	Least Important	2	2.50	.707	.500	-3.85	8.85	2	3
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	3.17	1.235	.182	2.81	3.54	1	6
	Important	78	3.46	1.365	.155	3.15	3.77	1	6
	Very Important	71	3.93	1.163	.138	3.65	4.20	1	6
	Total	200	3.56	1.282	.091	3.38	3.74	1	6
Seriousness of effect on health-Digestive disorders	Least Important	2	3.00	1.414	1.000	-9.71	15.71	2	4
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	3.50	1.027	.151	3.19	3.81	1	6
	Important	78	4.08	.964	.109	3.86	4.29	1	6
	Very Important	71	4.04	1.270	.151	3.74	4.34	1	6
	Total	200	3.92	1.113	.079	3.76	4.08	1	6
Seriousness of effect on health-Sleep difficulties	Least Important	2	2.50	.707	.500	-3.85	8.85	2	3
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	4.09	1.092	.161	3.76	4.41	2	6
	Important	78	4.27	1.040	.118	4.03	4.50	1	6
	Very Important	71	4.34	1.108	.131	4.08	4.60	1	6
	Total	200	4.23	1.078	.076	4.08	4.38	1	6
Seriousness of effect on health-Respiratory disorders	Least Important	2	3.00	1.414	1.000	-9.71	15.71	2	4
	Unimportant	3	2.00	.000	.000	2.00	2.00	2	2
	Neither Important Nor Least important	46	3.07	1.104	.163	2.74	3.39	1	6
	Important	78	2.67	1.649	.187	2.29	3.04	1	6
	Very Important	71	2.27	1.383	.164	1.94	2.59	1	6
	Total	200	2.61	1.452	.103	2.41	2.81	1	6
Seriousness of effect on health-High BP	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	2.00	.000	.000	2.00	2.00	2	2
	Neither Important Nor Least important	46	3.30	1.227	.181	2.94	3.67	1	6
	Important	78	2.56	1.640	.186	2.19	2.93	1	6
	Very Important	71	2.46	1.462	.174	2.12	2.81	1	6
	Total	200	2.68	1.502	.106	2.48	2.89	1	6
Seriousness of effect on health-Diabetes	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	1.00	.000	.000	1.00	1.00	1	1
	Neither Important Nor Least important	46	2.39	1.498	.221	1.95	2.84	1	6
	Important	78	1.94	1.540	.174	1.59	2.28	1	6
	Very Important	71	2.06	1.372	.163	1.73	2.38	1	6
	Total	200	2.07	1.461	.103	1.87	2.27	1	6

Seriousness of effect on health-Sprains and strains	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	1.00	.000	.000	1.00	1.00	1	1
	Neither Important Nor Least important	46	2.98	1.183	.174	2.63	3.33	1	6
	Important	78	2.53	1.457	.165	2.20	2.85	1	6
	Very Important	71	2.68	1.575	.187	2.30	3.05	1	6
	Total	200	2.66	1.444	.102	2.45	2.86	1	6
Seriousness of effect on health-Frequent cold and headache	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	3.76	1.353	.199	3.36	4.16	1	6
	Important	78	2.96	1.498	.170	2.62	3.30	1	6
	Very Important	71	3.38	1.377	.163	3.05	3.71	1	6
	Total	200	3.30	1.439	.102	3.10	3.50	1	6
Seriousness of effect on health-Irritable menstrual cycles	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	3.35	1.140	.168	3.01	3.69	1	6
	Important	78	2.76	1.572	.178	2.40	3.11	1	6
	Very Important	71	3.59	1.202	.143	3.31	3.88	1	6
	Total	200	3.20	1.385	.098	3.01	3.39	1	6
Seriousness of effect on health-Biological imbalance	Least Important	2	2.00	.000	.000	2.00	2.00	2	2
	Unimportant	3	4.00	.000	.000	4.00	4.00	4	4
	Neither Important Nor Least important	46	3.07	1.272	.188	2.69	3.44	1	6
	Important	78	3.08	1.696	.192	2.69	3.46	1	6
	Very Important	71	3.69	1.260	.150	3.39	3.99	1	6
	Total	200	3.30	1.466	.104	3.09	3.50	1	6
Seriousness of effect on health-Others	Least Important	2	.00	.000	.000	.00	.00	0	0
	Unimportant	3	.00	.000	.000	.00	.00	0	0
	Neither Important Nor Least important	46	.00	.000	.000	.00	.00	0	0
	Important	78	.00	.000	.000	.00	.00	0	0
	Very Important	71	.13	.335	.040	.05	.21	0	1
	Total	200	.04	.208	.015	.02	.07	0	1

(Source: Primary Probe)

Table 1.3 shows the opinion of women employees about various health problems encountered in BPO jobs leading to attrition. Fatigue is one among these health disorders. The mean value of very important/important 4.44/4.01 with S.D. .922/1.134 and opinion ranging from 3.76 to 4.65 with 1-6/2-6 response range. It clearly indicates that fatigue is considered as major health problem leading to attrition in BPOs.

Backache is another factor having the mean value for very important and important responses as 4.06/4.35 with S.D.

1.157/.835 and opinion range at 95 % confidence interval from 3.78 to 4.53 and the responses ranging from 2-6/1-6.

Spondylosis is also considered as a health problem leading to attrition in BPOs. It has mean value for very important/important responses as 3.93/3.46 with S.D. 1.163/1.365 and the range of opinion from 3.15 to 4.20. Response range is 1-6 in both the cases. Though the responses are scattered from 1-6 but explicitly reveal that spondylosis is one among the health problems leading to attrition in BPOs for women employee.

Digestive disorders have mean value for very important/important as 4.04/4.08 with S.D. 1.270/.964 and range of opinion from 3.74 to 4.34. These disorders are considered as important factor to contribute for attrition in BPOs based on the responses in above table. Responses ranged from 1-6.

Sleep difficulties has mean value as 4.34/4.27 with S.D. 1.108/1.040 for very important/important responses based on seriousness of health problems leading to attrition. As the opinion also ranges from 4.03 to 4.60 at 95 % confidence level which above 4 gives clear inference that this problem is one of the major factors for attrition in BPOs.

High blood pressure and Diabetes also contribute to attrition as health problems as the mean value for very important/important as 2.46/2.56 with S.D. 1.462/1.640 for high blood pressure and opinion ranged from 2.19 to 2.93. In case of diabetes the mean value for very important/important is 2.06/1.94 with S.D. 1.372/1.540 and opinion ranging from 1.59 to 2.38. The responses ranged from 1-6 giving a wide range of responses but most of the responses have an opinion supporting the fact that both of these factors are attrition factors in BPOs.

Sprains and strains has mean value for very important/important as 2.68/2.53 with S.D. 1.575/1.457 and opinion

ranging from 2.20 to 3.05 at 95% confidence interval giving the inference of attributing to sprains and strains as attrition factors in BPOs.

Frequent cold and headache contributes significantly to attrition as it has mean value of responses of very important/important nature as 3.38/2.96 with S.D. 1.377/1.498 and the opinion ranged from 2.62 to 3.71. This indicates that this health problem is also an important factor for attrition in BPOs.

Irritable menstrual cycles has been considered as a major factor to contribute to attrition in BPOs. It has mean value for very important/important as 3.59/2.76 with S.D. 1.202/1.572 and opinion ranging from 2.40 to 3.88 giving rise arrive at the conclusion that this health problem contributes to attrition in BPOs.

Biological imbalance is another important health problem contributing to attrition in BPOs. The mean value for very important/important is as 3.69/3.08 having S.D. values 1.260/1.696 and the opinion ranging from 2.69 to 3.99. Responses range from 1-6. As the mean values are very near to 4 which shows that this constitutes an important factor for attrition in BPOs.

Table 1.4: Various Health Problems and Attrition

ANOVA (5% significance level)						
Health Problems	Comparison	Sum of Squares	Df	Mean Square	F	Sig.
Seriousness of effect on health-Fatigue	Between Groups	26.399	4	6.600	6.194	.000
	Within Groups	207.756	195	1.065		
	Total	234.155	199			
Seriousness of effect on health-Backache	Between Groups	18.992	4	4.748	4.941	.001
	Within Groups	187.363	195	.961		
	Total	206.355	199			
Seriousness of effect on health-Spondylosis	Between Groups	20.139	4	5.035	3.196	.014
	Within Groups	307.141	195	1.575		
	Total	327.280	199			
Seriousness of effect on health-Digestive disorders	Between Groups	12.808	4	3.202	2.669	.034
	Within Groups	233.912	195	1.200		
	Total	246.720	199			
Seriousness of effect on health-Sleep difficulties	Between Groups	8.034	4	2.009	1.753	.140
	Within Groups	223.386	195	1.146		
	Total	231.420	199			
Seriousness of effect on health-Respiratory disorders	Between Groups	19.527	4	4.882	2.380	.053
	Within Groups	400.053	195	2.052		
	Total	419.580	199			
Seriousness of effect on health-High BP	Between Groups	24.574	4	6.144	2.822	.026
	Within Groups	424.581	195	2.177		
	Total	449.155	199			
Seriousness of effect on health-Diabetes	Between Groups	9.609	4	2.402	1.128	.345
	Within Groups	415.411	195	2.130		
	Total	425.020	199			

Seriousness of effect on health- Sprains and strains	Between Groups	15.219	4	3.805	1.855	.120
	Within Groups	399.976	195	2.051		
	Total	415.195	199			
Seriousness of effect on health- Frequent cold and headache	Between Groups	24.013	4	6.003	3.017	.019
	Within Groups	387.987	195	1.990		
	Total	412.000	199			
Seriousness of effect on health- Irritable menstrual cycles	Between Groups	32.038	4	8.010	4.463	.002
	Within Groups	349.962	195	1.795		
	Total	382.000	199			
Seriousness of effect on health- Biological imbalance	Between Groups	22.069	4	5.517	2.653	.034
	Within Groups	405.526	195	2.080		
	Total	427.595	199			

(Source: Primary Probe)

Table 5.8 shows significance level of difference in the opinion of those women employees who think that health problem is one of the reasons for attrition rate in BPOs. The significance ANOVA value of factors, viz., Sleep difficulties, Respiratory disorders, Diabetes, Sprains and Strains is greater than 0.05 which means that these problems are commonly faced by all the respondents and there is no significant difference in the opinion of those women employees who think that health problem is one of the reasons for attrition rate.

Whereas factors like Fatigue, Backache, Spondylosis, Digestive disorders, High BP, Frequent cold and Headache, Biological imbalance etc. have significance ANOVA value less than 0.05 (significance level), it means for these health problems these is significant difference in the opinion of those women employees who think that health problem is one of the reason for attrition rate and these problems are not commonly faced by them

Table 5.9: Shift of Working and Social Stigmatization leading to Attrition in BPOs

Shifts	Number	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Descriptives			
UK shift	57	4.00	.627	.083	3.83	4.17	2	5
US shift	58	3.72	.833	.109	3.51	3.94	1	5
Australian shift	12	4.00	.426	.123	3.73	4.27	3	5
Rotational shift	72	4.42	.746	.088	4.24	4.59	2	5
General shift	1	1.00	1	1
Total	200	4.06	.803	.057	3.94	4.17	1	5

(Source: Primary Probe)

Table 5.9 exhibits the opinion of women employees who are working in different shifts towards social stigmatization leading to attrition in BPOs. The women employees working in all shifts (except US shift) having mean value more than 4, which means that all those women employees think that working in international shifts (UK shift, Australian shift and Rotational shift) result in social stigmatization which ultimately leads to higher attrition in Indian BPO's. Moreover, the lower and upper bound of responses also range between 3 to 5 whereas, in the case of rotational shift upper and lower bound are 4.24 to 4.59 which means the average response in 95% confidence limit lies between 4.24 to 4.59.

Conclusion

Respondents opined that working in BPOs either in one way or the other affects the health of women employees. Sleep difficulties and Backache are the two major health problems faced by them. Health problems like fatigue, spondylosis, imbalance in biological system, frequent cold and headache do not show a severe effect on the health of employees with BPO working culture whereas problems such as irritable menstrual cycles, digestive disorders, high blood pressure, sprains and strains affects the employees moderately. In analysis of various health problems likely to be encountered by women employees their opinion again has different values. The responses of these

employees depict that the significance ANOVA value of factors, viz., Sleep difficulties, Respiratory disorders, Diabetes, Sprains and Strains is greater than 0.05 which means that these problems are commonly faced by all the respondents and there is no significant difference in the opinion of those women employees who think that health problem is one of the reason for higher attrition rate in BPOs

References

1. Phukan P.J. 2006. *The Changing Face of Indian Youth: Thanks to the BPO Industry*, n http://www.path2usa.com/articles/article_bpo_121505.html
2. Pradhan, J.P. and V. Abraham. 2005. *Social and Cultural Impact of Outsourcing: Emerging Issues from Indian Call Centers Harvard Asia Quarterly*, 9(3): 22–30.
3. Sharma, S. n.d. "Human issues in call centers and BPO industry- A report" <www.BPOindia.org> accessed on December 15, 2011
4. <www.livemint.com/2007/11/17012831/Long-working-hours-travel-tim.html>. accessed on 12th March, 2012.
5. Phukan, P.J. 2003. "Changing HR paradigm in the ITES sector." <<http://www.itpeopleindia.com/20031006/cover.html>> accessed on 25th December, 2011
6. Government of India, Department of Information and Technology. (n.d). *Information technology, Annual report 2007–08*, <<http://www.mit.gov.in/download/annualreport2007-08>> New Delhi: Department of Information Technology.
7. Ivana, L. (2010), "Women Employees in BPO" EzineArticles.com/?expert=Ivana_Lewis accessed as on 20th July 2010.
8. Techtree News Staff (2007), "Health Problems Plague BPO Sector", techtree.com/India/News/Health_Problems_Plaguigng_BPO_Sector/551-85519-547.html?up2cat=76/ accessed as on 20th July, 2010.

