

# Association between Quality of Life, Job Satisfaction and Organizational Stress among Call Center Employees: an Analysis

Mr. Sebastin K V\*

Dr. Shivappa R\*\*

Globalization and its consequent competitiveness and challenges employee has to inevitably face and put up with higher quantum of stressful demands on their work performance. Though Indian industrial set up was primarily oriented to manufacturing or production, today we also see a shift in the industrial focus, for example, the focus on service, infrastructural development and so on.

One of the radical changes in the highly stressful and demanding industrial set up in India is the introduction of IT sector and information technology enabled services (ITES). Today IT industries have taken centre stage in our society mainly due to its capacity to generate an enormous income to its promoters, the country and the employees themselves. Despite its many benefits and advantages, IT and ITES industries are also a source of greater demand and stress not only on the organization but also its employees without distinction across various cadres of its work force.

One among the significant segments of IT industry consists of the BPO units which include the Call Centers too. Call Centers are also referred to as Contact Centers (Wallace, 2009). Many companies have reached the

conclusion that the relationship with the customer should not end at the store door. These companies believe that customer access after the sale adds value to the transaction. Customer Call Centers have emerged as a leading weapon on this customer satisfaction battlefield. Call Centers allow a company to build, maintain and manage customer relationships by solving problems and resolving complaints quickly, having information, answering questions, and being available, usually all the days throughout the year (Feinburg et al, 2006).

Call Center services are now the most used form of customer interface and present the personality of the firm to the customer over the phone (Belt et al, 1999). They are one of the fastest growing parts of the information and service economy (Batt and Moynihan, 2005). Typically a Call Center caters to the marketing and sales as well as service needs of another organization. These other organizations need not necessarily be from the same country. As a result of which the Call Center employees have to sometime masquerade their own identities as well as interaction styles. In other words this denotes a false representation of one's own identity

---

\* Associate Professor, School of Social Work, Roshni Nilaya, Mangalore

\*\* Associate Professor, Department of Studies in Social Work, University of Mysore

and culture. Quite often within the four walls of a Call Center, the employees are forced to adopt a different culture, and to work at odd hours. For instance many Call Centers in India function late into the nights or during the nights exclusively to suit the timings of other organization in foreign countries such as the European and American nations. All these contribute to disruption in the natural socio-cultural set ups of the employees. So Call Centers have the potential to become breeding centers of newer problems in the lives of native employees.

#### **The nature of Call Center work**

According to Richardson et al. (2000) though production in Call Centers is highly specialized and associated with a division of labour, they often host only a limited range of occupation. These Call Center workers function extensively and intensively through the telephone, performing a relatively narrow range of tasks. Call Center industry publicists present exciting images of centers staffed by co-operative team working employees 'smiling down the phone' and talking to customers in a relaxed and professional manner in comforting regional accents (Bain & Taylor, 2000). Opposing images are brought by the symbolic expression "Battery farming or free range?" (Crome, 1998) based on the similarity between Call Center operations and egg farming.

An additional powerful negative description that has been used includes the "electronic panopticon" (Bain & Taylor, 2000). In most Call Centers, at any time,

supervisor can see what an agent is doing either visually through their computer monitors which list every agent, what they are currently doing, the number of calls they have taken, the number of calls in their queue and the length of time taken on calls. The time taken between calls also measured. If an agent is taking too long on a call, the supervisor can listen in to determine what the problem is. An agent can never be sure if the supervisor is listening in or taping a call (Lankshear et al, 2001).

Regarding the skill requirement of the Call Center employees and managers emphasize that Call Center work is far from being 'unskilled', despite the repetitive and standardized nature of much of their work. The majority of agents urge that certain set of skills and competencies are a must in Call Center work. In particular they stress the expertise involved in handling customers 'professionally' and efficiently under strict time pressures. Related to this, agents highlighted the skill involved in conveying the 'right image' to the public over the telephone. In addition, on the issue of skill, agents highlight the elements of discretion and responsibility involved in their work (Belt et al, 2000).

Lankshear and colleagues (2001) provide a good example of the kinds of skills agents need to bring to bear on their work. In their travel services Call Center study; the site organization had implemented pricing changes which were highly unpopular with clients. Consequently call volume increased, and call

time increased by 20%, and 'difficult' calls required to deal with tension between corporate and client needs also increased, although these agents received no additional training to help them explain pricing changes to clients or manage unpleasant calls. In this case, they were judged highly successful by management, with one manager quoted as saying that their staff has been absolutely brilliant

Emotional labour (Hochschild, 1983) is also frequently mentioned as an element of Call Center work. Employees must display and project through the telephone socially acceptable public emotions that they do not necessarily feel. This mastery is a skill that many managers believe women possess to a greater degree than men. Further, Belt, Richardson and Webster (2002) in their examination of social skills in interactive Call Center work, found that employers would explicitly admit to recruiting women assuming that they would better perform this kind of work. Call Center employers expect women to perform this kind of emotional labour skillfully over the phone, actively using their femininity in order to secure competitive advantage. They also note that female workers used "their femininity", particularly when dealing with male customers (ibid).

The psychosocial work environment at a Call Center implies several simultaneous demands, on the operators. He/she should be stress-resistant, empathetic, able to work in a team, success-oriented; should also have fast reactions, a wide vocabulary, be able to handle

a huge amount of information, be able to handle different types of customer, be able to handle emotional demands etc (Deery and Kinnie, 2004). There could be a risk of conflict between these demands and it is the operator who has to choose between serving a customer well and keeping the call-time down. At the same time the working activities of the operators are characterized by an extreme division of labor, by automatic distribution of calls and by technical performance control. Decision latitude for the operators is rather restricted (ibid).

The scholarly observations as cited above further underline the need to have a systematic empirical review of the whole set up from the local socio-cultural perspective through a methodologically valid research.

### **Review of Literature**

Quality of life is the degree to which a person enjoys the important possibilities of his/her life. Possibilities result from the opportunities and limitations each person has in his/her life and reflect the interaction of personal and environmental factors. Enjoyment has two components: the experience of satisfaction and the possession or achievement of some characteristics. Three major life domains are identified: Being, Belonging, and Becoming. The conceptualization of being, belonging, and becoming as the domains of quality of life were developed from the insights of various writers (Vitterso Joar, 2003).

Job satisfaction has been defined as a pleasurable emotional state resulting from the appraisal of one's job (Locke, 1976), an

affective reaction to one's job (Cranny et al, 2002) and an attitude towards one's job. Weiss (2002) has argued that job satisfaction is an attitude but points out that researchers should clearly distinguish the objects of cognitive evaluation which are affect (emotion), beliefs and behaviors. This definition suggests that we form attitudes towards our jobs by taking into account our feelings, our beliefs, and our behaviors.

Despite the job prestige and status they enjoy, the employees have been found to experience various kinds of stress related to their work and work place, which sometimes led to job dissatisfaction, burnout and turnover. Employees in industries feel vulnerable to stress arising from the interface of work. How the employees perceive a stress-provoking event and how they cope with it determines its impact on their health and well-being. Stress is an imprecise term. It is usually defined in terms of the internal and external conditions that create stressful situations, and the symptoms that people experience when they are stressed.

Many researchers have studied the effects of stress on performance. McGrath (1978) reported that mild to moderate amounts of stress enables people to perform some tasks more effectively. The rationale is that improved performance can be attributed to increased arousal. However, if the stressor continues, it eventually takes its toll, and results in decreased performance and deleterious health consequences. Furthermore, workers are aware of the toll that stress has

had on their own performances. Half of all workers say that job stress reduces their productivity (Lawless, 1992).

### **Objectives of the Study**

1. To study the socio- demographic profile of the employees of Call Centers.
2. To understand the quality of life of the respondents.
3. To estimate the level of job satisfaction among these employees.
4. To find out the organizational stress experienced by them.

### **Hypotheses**

1. Higher age of Call Center employees is associated with higher quality of life.
2. Married Call Centre employees have a better quality of life than unmarried employees.
3. Higher income level of Call Centre employees is associated with better quality of life.
4. The level of job satisfaction is higher among female employees compared to male Call Center employees.
5. Female Call Center employees experience higher level of organizational stress than male employees.

### **Materials and Method**

In order to achieve the above aim and objectives, a descriptive and diagnostic design was thought fit based on the scarcity of information, and knowledge into the subject of this study. Call centre employees who were working in Bangalore, India constituted the universe designed for the present study. The size of the sample was 300 and they were

selected from ten call centers through simple random sampling method. Quality Of Life (QOL) of the respondents under study is measured using WHOQOL-BREF, a scale developed by World Health Organization (WHO). The work stress was assessed by using organizational stress scale developed by Singh (1989) and the level of job satisfaction among the respondents was assessed by using job satisfaction scale developed by Singh and Sharma (1999). To test the hypothesis t – test and ANOVA was used.

### **Results and Discussion**

The findings from the socio-demographic data show that 56.3 percent of the study subjects were in the age group of 26-30 years. Among the total respondents 60 percent of them were female employees where as 40 percent of them were male employees. The marital status of the respondents revealed that 59.3 percent of the respondents are unmarried. Distribution of the religious affiliation was similar to the national employment trend with Hindus forming the majority (63.3%) and the rest forming the minority. Majority 60 percent of the respondents were from urban background. The type of family of the respondents reveals that 82.7 percent of them were from nuclear families. With regard to the place of origin of the call centre employees majority of them were from the urban area and they constitute 60 percent of the population under study. 74 percent of the respondents have 3 to 5 members in the family. The educational status of the respondents reveals that 79.7 percent of the respondents were

graduates. With regard to the residential status 42.3 percent of the respondents were residing in rented house. The monthly income distribution of the respondents revealed that 40.3 percent of them get a salary of Rupees 10,001-15,000 per month.

### **Quality of Life**

Quality of Life has been put on the agenda in many Organizations as individual employees' well-being seems to be decisive in determining the extent of their professional contributions (Daniels, 2000). There are significant associations between psychological well-being and a range of behaviors associated with performance and productivity such as absenteeism and commitment to the organization” (Brooke and Price, 1989).

Table No. 1 presents the descriptive statistics derived from the data on the domains of the scale which measures the Quality of Life of the Call Center employees. The domains are physical well being, psychological well being, social relations and environmental well being. The descriptive statistics presented in this table include minimum and maximum scores, the mean and standard deviation. It is significant to note that all the mean values were above the half point. The mean scores are suggestive of better Quality of Life among the Call Center employees.

### **Job Satisfaction**

Job satisfaction describes how contented an individual is with his or her job. The happier the people are with their job, the more satisfied they are said to be. Job satisfaction is not the

**Table No. 1**

**Descriptive Statistics pertaining to ratings on each domains of Quality of Life Scale**

QOL Domains	n	Minimum	Maximum	Mean	Std. Deviation
Physical Well being	300	28.57	91.43	64.38	9.33
Psychological Wellbeing	300	26.67	93.33	67.68	9.81
Social Relations	300	20.00	100.00	67.46	15.47
Environment	300	42.50	167.50	67.17	11.19

same as motivation, although they are clearly linked. Job satisfaction is a widely accepted psychological aspect of functioning in any profession. Job design aims to enhance job satisfaction and performance; methods include job rotation, job enlargement and job enrichment. Other influences on satisfaction include the management style and culture, employee involvement, empowerment and autonomous work groups. Job satisfaction is a very important attribute which is frequently assessed and monitored by organizations.

Table No.2 explains the level of job satisfaction among the Call Center employees. The table indicates that 13.33 percent of the subjects were extremely satisfied with their job where as 41 percent of them were very

satisfied. There were 20.67 percent of the subjects who were moderately satisfied.17.33 percent of them were not satisfied and 7.67 percent of them were extremely dissatisfied.

Despite the fact that the Call Center industry is a booming sector with intake of maximum man power, especially the youth, the satisfaction levels of employees in the organization seem to be scattered. Each of the dimensions has significant responses when we go in terms of the sheer number of the employees employed in the sector. Taking the positive, while the ‘extremely satisfied’ segment is substantially low, largely in terms of satisfaction levels, over fifty per cent are in the bracket of employees who are generally satisfied (including very satisfactory segment).

**Table No. 2**

**Level of Job Satisfaction of the Respondents**

Level of Job Satisfaction	Frequency	Percentage
Extremely dissatisfied	23	7.67
Not Satisfied	52	17.33
Moderately satisfied	62	20.67
Very satisfied	123	41.00
Extremely satisfied	40	13.33
<b>Total</b>	<b>300</b>	<b>100.00</b>

It is rather significant to note that despite the visibly satisfactory pay packages and the working hours in the organizations, there are as high as a quarter of the respondents who are not satisfied. Further, one out of five employees seems to be only moderately satisfied, which are factors of concern and a matter of introspection by the organizations.

### Organizational Stress

The present employment scenario, unlike in the past, has turned out to be quick paced, highly competitive and exponentially profit oriented. Thus, working in such a situation is bound to render a huge amount of stress among the employees. The transfer of stress from the higher-ups in the organization to the very last employee of the hierarchical order is observed significantly in each of the sectors today and Call Centers in particular. This is also because,

in the Call Center industry, it is all about stringent deadlines, client satisfaction and portrayal of better levels of efficiency and visibility of organizations to gain new contracts and expansion.

Table No. 3 presents the descriptive statistics derived from the data on the dimensions of the scale which measures the stress experienced by the Call Center employees. These dimensions are related to lack of group cohesiveness, role conflict, feeling of inequality, role ambiguity, role overload, lack of supervisory support, constraints of change and role regulations, job difficulty, job requirement capability mismatch, and inadequacy of role authority. It is significant to note that all the mean values were well above the midpoint. This implies a significant skew towards higher rating

**Table No. 3**  
**Descriptive Statistics pertaining to ratings on each subscale of Organizational Stress Scale**

Sub scales of Organizational Stress	n	Minimum	Maximum	Mean	Std. Deviation
Lack of Group cohesiveness	300	4.00	20.00	12.14	3.02
Role conflict	300	5.00	23.00	14.21	3.59
Feeling of inequality	300	3.00	15.00	8.71	2.47
Role ambiguity	300	4.00	20.00	12.30	2.87
Role Overload	300	5.00	25.00	14.71	3.45
Lack of supervisory support	300	3.00	15.00	8.88	2.21
Constraints of change and role regulations	300	2.00	10.00	5.60	1.64
Job difficulty	300	2.00	10.00	5.51	1.59
Job requirement capability mismatch	300	3.00	15.00	8.95	2.07
Inadequacy of role authority	300	2.00	10.00	5.83	1.70

denoting an above average organizational stress experienced by the Call Center employees.

Despite higher level of Quality of Life and job satisfaction, the stress levels are higher among the employees for a simple fact relating to the nature of the work concerned. The interaction with the clientele, the swiftness in response and deadlines are quite demanding, which naturally increases the stress levels of the employees.

### Testing of Hypotheses

In the present study, five hypotheses had been formulated with the literature reviews and in consultation with different experts related to the field. The hypotheses which were formulated were tested by using different statistical tests like one way ANOVA and t-test. The results and discussion of hypotheses testing has been presented herewith.

**Hypothesis 1:** Higher age of Call Center employees is associated with higher quality of life.

**Table No. 4**  
**Correlation between the Variables**

Variables	Job satisfaction	Organizational Stress
Quality of Life	0.032	-0.131*
Job Satisfaction		0.087

\*correlation is. significant at 0.05 levels

Table-4 describes the results of correlation matrix between the study variables. The correlation indicates that the Quality of Life and organizational stress have a statistically significant negative correlation. Further the study found that there is no correlation between job satisfaction and organizational stress.

**Table No. 5**  
**ANOVA results for Effects of Age on Quality of Life**

Age of the Respondents	n=300	QOL Scores			
		Mean	SD	Minimum	Maximum
21-25	96	52.54	7.25	32.38	73.12
26-30	169	53.41	6.69	32.05	76.45
31-35	23	53.03	10.28	34.33	73.38
36-40	12	59.29	9.30	46.64	79.79
<b>F=3.12 df=3, 297 P&lt;0.05(Sig)</b>					



**Inference:** To test the above hypothesis, the researcher applied One Way ANOVA and the results showed that there is a statistically significant difference among the groups of respondents who belong to the age group of 36-40 years of age with reference to Quality of Life. Hence, the research hypothesis is accepted.

**Hypothesis 2:** Married Call Centre employees have a better quality of life than unmarried employees.

**Table No. 6**  
**ANOVA results for Effects of Marital Status on Quality of Life**

Marital Status	n=300	QOL Scores			
		Mean	SD	Minimum	Maximum
21-25	96	52.54	7.25	32.38	73.12
26-30	169	53.41	6.69	32.05	76.45
31-35	23	53.03	10.28	34.33	73.38
36-40	12	59.29	9.30	46.64	79.79
<b>F=3.12 df=3, 297 P&lt;0.05(Sig)</b>					

**Inference:** To test the above hypothesis, the researcher applied One Way ANOVA and the results showed that there is a statistically significant difference among the respondents. The data reveals that the respondents who were married had a better quality of life. Hence, the research hypothesis is accepted.

**Hypotheses 3:** Higher income level of Call Centre employees is associated with better quality of life.

**Table No. 7**  
**ANOVA results for Effects of Income on Quality of Life**

Income in Rupees	n=300	QOL Scores			
		Mean	SD	Minimum	Maximum
d"10,000	46	50.12	7.26	35.95	73.38
10,001-15,000	121	53.25	7.69	32.38	76.45
15,001-20,000	117	53.85	7.01	36.05	79.79
20,001-25,000	16	54.89	8.04	32.05	66.64
<b>F=3.12 df=3, 297 P&lt;0.05(Sig)</b>					

**Inference:** To test the above hypothesis, the researcher applied One Way ANOVA and the results showed that there is a statistically significant difference among the groups of respondents with reference to quality of life. The data shows that the employees with higher income group had a better quality of life. Hence, the research hypothesis is accepted.

**Hypothesis 4:** The level of job satisfaction is higher among female employees in comparison with male Call Center employees.

**Table No. 8**  
**t-test results for Effects of Gender on Job satisfaction**

Gender	n=300	Job Satisfaction Scores		
		Mean	SD	t-value
Male	120	70.39	7.17	<b>1.580</b> <b>P&gt;0.05 (NS)</b>
Female	180	71.77	7.61	

**Inference:** To test the above hypothesis, the researcher applied Student’s t-test and the results showed that there is no statistically significant difference between the male and female respondents with reference to the two variables under investigation. Hence, the research hypothesis is rejected and the alternate hypothesis is that the sex of the employees and job satisfaction are independent.

**Hypothesis 5:** Female Call Center employees experience higher levels of organizational stress than male employees.

**Table No. 9**  
**t-test results for Effects of Gender on Organizational Stress**

Gender	n=300	Organizational Stress Scores		
		Mean	SD	t-value
Male	120	2.90	0.56	<b>0.48</b> <b>P&gt;0.05 (NS)</b>
Female	180	2.93	0.58	

**Inference:** To test the above hypothesis, the researcher applied Student’s t test and the results showed that there is no statistically significant difference between the male and female respondents with reference to the organizational stress experienced. Hence, the research hypothesis is rejected and the alternate hypothesis is that these two variables are independent.

### **Implications on Social Work Profession and Social Work Professionals**

Social work profession focuses on building capacities of people to take care of their psycho-social concerns individually, in groups and as an entire community depending on the intensity of such concerns. The present study has brought out interesting findings which could very well be integrated into social work practice in the field of human resource, corporate counseling and industrial social

work. The implications on social work practice are discussed below:

- As the stress levels are found to be high among the participants who have two to three years of experience, planned and structured intervention needs to be designed and conducted for these employees. If this trend continues, as the employees join the organization, effort needs to be made to prevent such conditions whereby they are

trained on handling pressures and stressful situations positively.

- The interventions need to be designed depending on the problems encountered by the employees. The techniques of case work can be utilized with the employees who have specific personal issues which, perhaps, cannot be tackled when engaging them in a group experience. If there is a common concern experienced by a sizeable number of employees, group work techniques could be used. If there is a problem concerning the entire company, accordingly, interventions have to focus on working with different stakeholders who play a significant role in bringing about a healthy environment for the employees to work.

- It is also important for the HR social worker to take up an audit of the psychosocial needs or issues concerning the employees along with the regular HR audit and take necessary action. This audit needs to have social work research as the base to study this phenomenon.

- The effort of identifying the different psycho-social needs should not just stop with understanding the phenomena but it should go further and design employee friendly policies which could be practiced uniformly by the companies. The social worker needs to hold a consultation with relevant higher authorities and internal and external resource persons in order to put the policy in place.

- The companies could think of having open door policy formulation whereby the employees can freely come forward and give

recommendations or highlight the areas that need to be modified or changed in the company's functions. This is in view of practicing social work value of having democratic practice.

- Depending on the company's abilities, celebrating special days of the individual employees would make the employees feel comfortable and motivated to perform to the best of their abilities.

### **Conclusion**

The study successfully brings to fore beyond doubt that that the different parameters and its correlation bears a significant impact on the personal effectiveness of an individual.

The sector has seemingly been effective in providing reasonable comfort levels to the employees in terms of salaries, work environments, incentives and other pre-requisites for a decent living, though the working time schedules are not in sync with the conventional ones. The working hours cannot be considered as a flaw due to the fact that the industry serves global clients who work in different time frames. Thus this factor should not be taken as a hitch or a constraint. The employees are overall happy with the assignments that they are given and work against deadlines which in due course of time does not seem to be of any kind of hurdle or a challenge, The pre-employment or pre-placement trainings rendered to the employees enable them to cope up with the technicalities of the work that needs to be done in specific areas of the industry.

However, the demand that the industry

poses in terms of workload may lead to higher stress levels. This again seems to be inevitable in an industry that is so demanding. However, the stress factor could well be under control when the support system is conducive.

Thus, the study very candidly indicates the strengths and shortcomings of the sector in different areas, which need to be addressed taking one parameter at a time or a cluster of

them depending on their correlation. The pre-employment training in technical aspects, study and redressing of personal factors like stress, comfort levels, including the physical pain and psychological discomforts (if any) on a personal and group basis, through an array of tools like counseling, stress relief workshops and other means, would go a long way in improving the situation of the sector.

#### REFERENCES:

- Bain, P., & P. Taylor (1999). "Entrapped by the "Electronic Panopticon" Worker Resistance in the Call Centre." *New technology, Work and Employment* 15(1):2-18.
- Batt, R. and Moynihan. (2002) 'The viability of Alternate Call centre production models' *Human Resource Management Journal*, 12(4):14-34.
- Belt, V., R. Richardson & J. Webster (1999): "Women's work in the information economy: The case of telephone call Centers." *Information, Communication and Society*: 366-385.
- Brooke, P.P. and J.L. Price: (1989) 'The determinants of employee absenteeism: an empirical test of a causal model', *Journal of Occupational Psychology* 62: 1-19.
- Crome, M. Call Centers. (1998). *Battery Farming or Free Range?* *Industrial and Commercial Training*, 30(4):137-141.
- Cranny, Smith & Stone, 1992 cited in Weiss, H. M. (2002). *Deconstructing job satisfaction: separating evaluations, beliefs and affective experiences.* *Human Resource Management Review*, 12:173-174.
- Daniels, K.: 2000. 'Job features and well-being', in K. Daniels, D. Lamond and P. Standen (eds.), *Managing Telework. Perspectives from Human Resource Management and Work Psychology*, 73-82.
- Deery, S. and N. Kinnie. (2004). 'Introduction to The Nature and Management of Call Centre Work' - *Call Centres and Human Resource Management: Across National Perspective*, 1-22.
- Feinberg, Richard: Ruyter Ko de : and Bennington, Lynne (2006): *Cases in Call Centre Management*, Jaico Publishing House. Mumbai, 1-60.
- Hochschild, A.R. (1983). *The Managed Heart*, Berkeley, University of California press.
- Joar Vitterso, Sigmund Akselsen, Bente Evjemo, Tom Erik Julsrud, Birgitte Yttri and Svein Bergvik .(2003). *Impacts of Home-Based Telework on Quality of Life for Employees and Their Partners. Quantitative and Qualitative Results from a European Survey*, *Journal of Happiness Studies*, 4(2):96.
- Lawless, P.(1992). *Employee Burnout: Causes and Cures*. Minneapolis, MN: Northwestern National Life Employee Benefits Division. 11
- Lankshear, G., P. Cook, D. Manson, S. Coates & G. Button. (2001). "Notes and Issues: Call Centre Employees' Responses to Electronic Monitoring: Some Research Findings." *Work, Employment & Society*, 15 (3): 595-605.
- Locke, 1976 cited in Brief, A. P., & Weiss, H. M. (2001). *Organizational behavior: affect in the workplace.* *Annual Review of Psychology*, 53: 282.
- McGrath, J. E.(1976). "Stress and behavior in organizations." In *Handbook of Industrial and Organizational Psychology*. Dunnett, M. D. (ed) Chicago: Rand McNally College Publishing, 13-52.
- Russel, B. (2004). 'Are all call centres the same?', *Labour and industry*, 14:91-109.
- Richardson, R., Belt, V. and Marshall, N. (2000). "Taking calls to Newcastle: the regional implications of the growth in call centers." *Regional Studies* 34(4): 357-69.
- Richardson, R., Belt, V. (2001): "Saved by the Bell? Call centers and Economic development in less favored regions." *Economic and Industrial Democracy* 22(1):67-98.
- Richardson, R., Belt, V. and Marshall, N. (2000). "Taking calls to Newcastle: the regional implications of the growth in call centers." *Regional Studies* 34(4): 357-69.
- Weiss, H. M. (2002). *Deconstructing job satisfaction: separating evaluations, beliefs and affective experiences.* *Human Resource Management Review*, 12:173-194.