

Occupational Role Stress: a Study of Indian Business Process Outsourcing Employees

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Abstract: The fierce competition among multinationals to reduce cost has forced many organisations to shift their non core operations to low cost and high quality destinations like India. This has resulted in exponential growth in the number of business process outsourcing centres in India. It mainly deals with customer interaction services, human resources, data search/integration etc. under the aegis of Business Process Outsourcing (BPO). The employees work in prolonged shifts round the clock. To provide real-time services to global customers they have to compromise with their own biological clock. Consequently they become easy prey to various psycho-physiological ailments. Researches have revealed that psychological stress and its physiological symptoms are the most common problems amongst call-centre executives (Luce & Juravich, 2002). Occupational Role Stress Scale (Pareek, 1983) will be used to find the level of role stress among the call centre employees. Student's t-test will be used for analysis purpose. The study is expected to identify stress related issues being faced by call centre employees.

The last decade has witnessed exponential growth in the number of business process outsourcing organisations in Indian metropolitan cities. The fierce competition among multinationals to reduce cost has prompted many organisations to shift their peripheral (non core) operations to low-cost and high-quality destinations like India (Faruque *et al.*, 2005). A BPO is also popularly known as Call Center.

Although the Indian information technology industry has existed since the early 1980s, it was the early and mid 1990s which saw the emergence of outsourcing. However, the sector got a vital boost at the end of 1990s when Multi National Companies established wholly owned subsidiaries which catered to the off-shoring requirements of their parent companies. American Express, GE Capital and British Airways were some of the earliest players in the Indian outsourcing market. The Indian business process outsourcing industry's growth is reflected across multiple dimensions. Today the Indian business process outsourcing industry has matured and is offering whole array of outsourced services ranging from customer care, medical transcription, medical billing services, database management, web sales / marketing, accounting, tax processing, document management, telesales, telemarketing, human resource hiring and biotech research (Outsource2india, 2011). The industry has grown to reach almost US\$ 11 billion in export revenues, employs more than 700000 people and accounts for more than 35% of the world business process off-shoring market (Chandran, 2011).

Modern times have been called the "age of anxiety and stress" (Coleman, 1976). Stress is an unavoidable part of an individual's working life (Cooper *et al.*, 1988). It can have both positive and negative physiological as well as psychological implications. On the one hand, it can make an individual more excited and agitated and make him perceive the situation positively and as a challenge (Selye, 1956). On the other hand, it also poses a threat to the quality of life as well as physical and psychological well-being (Cox, 1978).

Stress is a complex issue but generally it is defined as a physical, mental, or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures, and similar stimuli (Fontana & Abouserie, 1993). High levels of occupational stress not only have detrimental influence on the quality, productivity and creativity of the employees but also on their health, well-being and morale (Frese, 1985; Calabrese *et al.*, 1987; Matteson & Ivancevich, 1987; Cohen & Williamson, 1991). It may also result in problems such as hyperirritability, sleep disturbances, disturbed interpersonal relationships, as well as wide range of somatic and psychological problems (Hafner, 1968; Strange & Brown, 1970; Hersen, 1972; Wolfe, 1986). Stress is often described as being associated with emotions such as anger, anxiety and depression (Cox, 1978), and there is evidence to suggest that it is also related to impoverished mental health (Cooper, 1996). Role based factors such as lack of power, role ambiguity and role conflict have been linked to stress (Burke, 1988).

Earlier studies conducted on Indian information technology settings have highlighted the prevalence of high occupational stress (Srivastava & Srivastava, 1985; Pareek & Mehta, 1997; Mathur, 1997; Mishra *et al.*, 1997). Call centre executives work in prolonged shifts round the clock. To provide real-time services to global customers they have to

compromise with their own biological clock. Consequently they become easy prey to various psycho-physiological ailments. Researches have revealed that psychological stress and its physiological symptoms are the most common problems amongst call-centre executives (Luce & Juravich, 2002). Call centre executives are reported to suffer from high levels of stress (Luce & Juravich, 2002) and its excessive levels may lead to dissatisfaction, lower morale, and poor work performance (Firth-Cozens, 1987). Work related stress and anxiety not only affect the executives' health but it can also have an impact on the quality of services provided (Firth-Cozens, 1993). Psychological stress and anxiety may have a profound effect on an individual's well being (Birch & Kamali, 1998; Caplan, 1994). However nature and magnitude of job stress among Indian information technology professionals varies with various demographic factors (Aziz, 2004). Some of the factors that cause stress amongst business process outsourcing employees are: demanding customers, time pressure, monitoring, pressure to complete calls, lack of training, mandated scripting etc. It causes certain physical and psychological problems for the employees such as fatigue, irritability, inability to relax, headaches, backaches, vision problem, sleep problems, stomach problems, carpal tunnel, high blood pressure, hearing problems, respiratory problems etc. (Luce & Juravich, 2002). Sudhashree *et al.* (2005) found that business process outsourcing employees suffer from burnout stress syndrome (BOSS), issues of identity and isolation. Another study by Faruque *et al.* (2005) found men to be higher on physical stress while women were higher on psychological as well as social relational stress.

The Concept of Role

An important aspect of organisation that integrates an individual with the organisation is the role assigned to him / her within the overall structure of the organisation. It is through role that an individual interacts and gets integrated with the system. In fact, an organisation can be defined as the system of roles.

Kahn *et al.* (1964) postulated that the quest for identity is a central concern for many individuals and considered a specific type of stress in the form of role stress. Constructs like role conflict, role ambiguity, and role overload were put under the construct of role stress.

Role is a set of obligations generated by the '*significant others*' and the individual occupying an office. It denotes set of functions one performs in response to the expectations of the '*significant others*', and one's own expectations from that position or office (Pareek, 1993). Each role has its system. This consists of the role occupant and those who have a direct relationship with him, and thereby, certain expectations from the role. These '*significant others*' having expectations are role senders. They send expectations to the role. As role occupant also has expectation from his role, he too is a role sender. Thus a role is not defined without the expectations of the role senders, including that of the role occupant.

Methodology

The purpose of this study is to understand differences in the level of role stress experienced by male and female employees in business process outsourcing organisations. The study uses a descriptive research design.

Sample

The sample for this study was selected from 3 different business process outsourcing organisations. The sample is from National Capital Region (NCR). The NCR comprises of the national capital Delhi and the adjoining districts of Gaziabad, Faridabad, Gurgaon and Noida. Ease of conducting survey and ensuring high response rate guided the decision to restrict the geographical area of the study. To ensure representation of population in the sample, the information technology organisations affiliated to NASSCOM (National Association of Software and Services Companies) were considered. Out of these, 3 organisations namely Convergys, 3i Infotech Limited and Genpact Limited were chosen through convenience sampling.

Initially 300 questionnaires were mailed to full time business process outsourcing employees. 147 questionnaires were returned in the first instance giving a response rate of 49%. Second mailing resulted in return of 38 questionnaire bringing the response rate to 61.66%. Further reminders and third mainly resulted in further return of 41 questionnaires thus giving an overall response rate of 75.33%. The elimination of questions with missing data (7 in numbers) produced 219 complete questionnaires, or 73% of the original 300 questionnaires mailed.

Instrument

The instrument used for collecting data is 'Organisational Role Stress Scale' (ORS Scale). The ORS scale is a comprehensive tool to elicit data about different role stressors afflicting a respondent. It covers a range of stressors that may be experienced by an occupational group. Specifically this instrument covers ten role stressors:

1. **Inter Role Distance (IRD):** Conflict between the organisational and non-organisational roles.
2. **Role Stagnation (RS):** Feeling of being stuck in the same role. It results into perception that there is no opportunity for one's career progression.
3. **Role Expectation Conflict (REC):** Conflicting expectations or demands by the different role senders i.e. the significant others who have expectations from the role.
4. **Role Erosion (RE):** Feeling that functions that should belong to incumbent's role are being transferred, performed or shared by other roles. It is a feeling of responsibility without power.
5. **Role Overload (RO):** Feeling that too much is expected from the role than what the occupant can cope with. It has two aspects – quantitative and qualitative.
6. **Role Isolation (RI):** Lack of linkages of one's role with other roles in the organisation.
7. **Personal Inadequacy (PI):** Lack of knowledge, skills or adequate preparation to be effective in a particular role.
8. **Self-Role Distance (SRD):** Conflicts of one's values and self-concepts with the requirements of the organisational role.
9. **Role Ambiguity (RA):** Lack of clarity about expectations of others from the role, or lack of feedback on how performance is regarded by others. It may be in relation to the activities, priorities, norms or general expectations.
10. **Resource Inadequacy (RIn):** Non-availability of resources needed for effective role performance.

The scale contains five items for each role stress i.e. a total of 50 statements, and uses a 5-point scale, from 0 to 4. Thus, the total score on each role stress ranges from 0 to 20 and the total ORS score from 0 to 200. The ratings are totalled (for five items) to get the total score for each role stressor. Score up to 5 is categorized as low stress, 6-10 is moderate, 11-15 is high and 16–20 is very high.

The ORS scale was developed by Pareek (1983a, 1983b) and has high reliability and validity (Pareek, 1983a, 1983b). It can be used to generate data about varied stresses experienced by a respondent. Analysis of data collected can help in identifying potent stressors in an occupational group and strategies can be suggested to manage and reduce stress.

Result and Discussion

Past researches conducted in the area of gender differences in occupational stress have yielded mixed results (Jick T.D. & Mitz L.F., 1985; Baruch *et. al.*, 1987; Martocchio J.L. & O'Leary A.M., 1989; McDonald L.M. & Korabik K, 1991; Aditya, S. M. & Sen, A.K., 1993; Lim V.K.G. & Teo T.S.H., 1996). Comparison of ORS scores of male and female employees reveals that there is no significant difference between the two groups. The total ORS score for these two groups is almost the same (69.46 vis-à-vis 69.43). However, there is some difference in the standard deviation of these two groups. The standard deviation for male employees (16.79) is more than that of women employees (15.39). This indicates the dispersion of stress among women employees is not wide. Male employees report comparatively wider dispersion suggesting that the scores do not tend to cluster around mean. Thus it points to the fact that men differ in their responses to some type of situations. Some are feeling more stress than others although the macro environment is uniform. The data reveals significant differences between male and female employees on inter role distance, role stagnation, role expectation conflict, role erosion and role isolation. There are no significant differences on the other role stressors. It is observed that the standard deviation for personal inadequacy is comparatively high for both men and women (4.06 for men and 4.18 for women). This suggests that all the business process outsourcing employees are not experiencing the same amount of stress on this stressor. A group of employees is feeling more stressed on this count. For inter role distance, the standard deviation for men is high (4.04) as compared to women (3.59).

Higher role stagnation for male employees is reflective of the fact that more men are working at higher level position than women and hence perceive lesser chances of upward mobility in the short run. There are fewer women at top level working in critical areas. Thus there are fewer chances for them to get promoted to positions that require higher set of skills for satisfactorily performing the job. Also, this may also be indicative of lesser promotional opportunities for women as compared to men. Some women did mention that they had to forgo promotions, particularly those who got promotion along with transfer. This was mostly reported by younger married women with younger children.

Table 1. Comparative scores of male and female employees

Role Stressors	N = 219				Df	t-value
	Mean		SD			
	Men N = 115	Women N = 104	Men N = 115	Women N = 104		
IRD	8.11	7.12	4.04	3.59	217	3.32**
RS	9.38	8.20	3.78	4.09	217	2.31**
REC	5.31	6.33	3.38	3.55	217	2.49**
RE	7.11	7.71	3.83	2.71	217	1.71**
RO	7.24	7.81	3.70	3.81	217	1.41
RI	5.16	4.32	3.29	3.04	217	2.12*
PI	7.51	8.16	4.06	4.18	217	1.31
SRD	6.17	5.59	3.16	2.89	217	1.29
RA	4.84	4.97	3.21	3.11	217	0.06
Rin	8.63	9.22	3.32	3.41	217	1.19
ORS	69.46	69.43	16.79	15.39	217	0.15

*Significant at 0.05

** Significant at 0.01

Table 2. Analysis on the basis of marital status

Role Stressors	N = 219				df	t-value
	Mean		SD			
	Married N = 98	Unmarried N = 121	Married N = 98	Unmarried N = 121		
IRD	9.51	7.30	4.04	3.52	217	4.76**
RS	9.56	8.27	4.53	3.51	217	2.63**
REC	6.61	5.23	3.93	3.11	217	3.24**
RE	7.17	7.61	3.27	3.49	217	1.19
RO	9.27	6.29	3.79	3.33	217	6.79**
RI	4.99	4.61	3.21	3.30	217	0.91
PI	8.35	7.29	3.73	4.34	217	1.89
SRD	5.57	6.09	2.97	3.05	217	1.31
RA	4.99	4.88	2.89	3.09	217	0.43
Rin	9.67	8.46	3.31	3.37	217	2.97**
ORS	75.69	66.03	16.51	12.93	217	4.91**

*Significant at 0.05

** Significant at 0.01

Table 3. Gender based analysis among married respondents

Role Stressors	N = 98				Df	t-value
	Mean		SD			
	Male N = 42	Female N = 56	Male N = 42	Female N = 56		
IRD	10.67	8.65	3.98	3.91	96	2.51*
RS	10.51	8.74	4.22	4.51	96	2.15*
REC	5.89	7.33	3.78	3.84	96	2.18*
RE	6.69	7.56	3.83	2.14	96	1.51
RO	7.61	10.37	4.21	2.56	96	4.70**
RI	5.59	4.96	3.16	3.22	96	0.83
PI	7.78	8.29	3.82	3.31	96	1.65
SRD	5.81	5.38	3.11	2.74	96	1.16
RA	4.89	5.16	2.61	3.11	96	0.76
Rin	9.72	9.17	3.11	3.56	96	0.43
ORS	75.63	79.61	21.81	15.83	96	0.89

*Significant at 0.05 ** Significant at 0.01

As far as the difference between married and unmarried employees is concerned, married employees come out as more stressed than unmarried employees. Total ORS score for married employees is 75.63 as compared to 66.03 for unmarried employees. The stress associated with balancing family and work roles may be particularly problematic during the period of early career formation. Early career formation often coincides with the early stages of family formation (White *et. al.*, 1992).

As far as specific stressors are concerned, role overload emerges as the dominant stressor among married woman than married men (10.37 vs. 7.61). The standard deviation for women is 2.56 as compared to 4.21 for men. This clearly indicates that the married women feel role overload across the board. It is understandable that married women have a higher score on role overload vis-à-vis married men. The social reality of India is that working women are not absolved of their homely duties. They continue to shoulder these responsibilities. In fact, a majority of women end up doing double shift, one in the office and one at home. This results in the feeling of role overload. This is consistent with earlier researches done in the west. Uhlenberg and Cooney (1990) found that the sex-linking of the household work is clear. Women doctors were doing almost as much of the household chores as the full time housewives married to their male counterparts in U.K. Frankensteiner (1991) also found that for majority of married women working in Sweden, the division of labour between spouses at home has not changed. Internal normative value conflicts' can arise leading to additional stresses which are unique to women. That is each role of wife/mother/employee requires excellence in distinct ways and feelings of guilt and worry can occur as a consequence of not feeling successful at any one (Cartwright L., 1987).

As far as inter role distance is concerned, it is found that male married employees are feeling higher level of stress on this count. The reason for this may be incompatibility between job and family roles. As men are working at higher positions than women, they have to invest more time and energy in their work roles thus reducing the time for family roles. This is in line with the rational view (Gutek, Serle & Klepa, 1991) that the extent of inter role conflict is directly proportional to the amount of time or energy expended in each domain. As men rise in position they have even lesser time for family thus resulting in inter role distance. As far as Role Expectation Conflict is concerned, women scoring higher on this count is understandable as they face different expectations from different role senders in their work and family. In the office they are expected to be aggressive, ambitious and task oriented. Successful job performance and the associated rewards may be contingent upon demonstration of these behavioural characteristics. However, in the home situation, being loving, supportive, accommodating and relationship oriented may be considered essential to the development of a positive family life. These opposing behavioural expectations may create tension within the individuals as they make transition from one environment to the other (Greenhaus & Beutell, 1985).

Conclusion

The study finds similar level of stress for male and female employees on the overall organisational role stress. However, on individual stressors, there are statistically significant differences between male and female employees. Statistically significant differences have also been reported between employees on the basis of their marital differences. Similarly, the study has reported gender differences among married employees. It is imperative for organisations to factor in these differences while designing any stress management strategy.

If proper corrective measures are taken to deal with the psychological problems of these employees it is expected that they will be able to perform better and contribute to the effective and efficient working of the organisation.

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