Prevalence of Stress among Call Center Employees

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This study explores the level of stress among call center employees. The aim of the research was to analyze whether stress level varies with reference to gender, shift work, and type of organization (inbound or outbound call center). A purposive sample of 191 Customer Support Representative (men = 106 & women = 85) from three inbound and three outbound call centres of Lahore was obtained. The age range of the sample varied from 19 – 40 years (M = 24.81, SD = 3.69). Degree of Job Stress Scale (Chow, 2005) was utilized to measure the level of occupational stress; it is a 20 item self-report 5-point likert scale, the reliability of the scale ranged from 0.80 to 0.86. Customer Service Representatives (CSR's) were approached via their team leads at their work place. After obtaining informed consent questionnaires were distributed among the CSR's and were collected subsequently. Reliability analysis of the scale was also conducted for the present sample, which was significantly high *(r* = .88). The individual scores were then analyzed using SPSS and t-statistics was employed to analyze the results. The analysis confirmed the hypothesis and revealed significant differences in the level of stress with reference to shift work and type of organization (inbound or outbound call center). Present research has significant implications for call center employees and management.

Keywords: Stress, gender, shift work, type of organization, Call Center Employees,

Stress is inevitable in an individual's life. It sometimes describes threats or challenges, other times our responses. Stress is not just a stimulus or a response. It is the process by which we appraise and cope with environmental threats and challenges (Myers & Myers, 2004). Stress refers to the uneasiness we feel when we are unable to handle the demands of everyday life (Adams & Bromley, 1998). Stress is common in everyday life; however its severity might vary depending upon the type of person, situation and the availability of support.

A vast majority of research body connects stress with the fast lifestyle of today's global world. Many researchers attribute this fast life style to the development of modern day technologies. According to these researchers the development of modern technology has forever altered the structure of our society and social life by increasing the speed with which we use to do things, thus adding to the stress (Hoffman, Novak, & Venkatesh, 2004).

Technology has not only affected our social life but it has changed the way we think about everything from our home to work, our lifestyle, values, and what's possible and impossible. It affects us in ways we can't even begin to articulate ((Murray, 1998). It has changed the way we live, though not for the better, since technology can not only cause stress to those who use it but also to those who fear it, resulting in techno-stress (Weil, 2003).

Techno-stress builds up because technology lets us do so much at the same time, enormous amounts of information is pouring in from all sides through computers, telephones, communicators etc and one ends up feeling overwhelmed and is unable to process the information overload. Technology along with increasing the speed, with which information is processed and acquired, has changed our perception of time and altered our internal clocks. Thereby speeding up our mentality and giving us unrealistic expectations of ourselves, causing fatigue and physical stress and encouraged more multitasking (juggling multiple thoughts and actions simultaneously), creating extra stress and anxiety (Weil, 2003)..

Like all other aspects of life technology has also greatly transformed today's global multicultural work settings. Machines to a large extent have replaced human work force, leaving only a small number of people juggling with complicated mechanical systems. While such technology has increased the efficiency with which people work, it has also added to the anxieties of work life in the form of information overload, heightened pressure for productivity, and a threatening sense of impermanence in the workplace. Thus, adding to the stress of employees all around the world.

Technology has converted our world into a global society where everything is accessible; as a result businesses are constantly competing to keep their place in the market further stressing their employees; who feel overwhelmed by the competing demands and pressures. As a result the stress of work turns in to a living nightmare of running faster and faster, from which they are unable to escape. They feel anxious while going to work, their motivation for work decreases, and they try to avoid the situation, thus increasing the rate of absenteeism and turnover.

The situation even worsens in technologically advanced call centers that are quickly springing up across the globe. As businesses have to cater to the needs of customers belonging to different parts of the worlds and have to compete to increase their

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market share they feel the need to be connected with their customers 24 hours a day 7 days a week (24/7). As a result the call center environment has become one of the most stressful areas in corporations today, and the stakes are high (Cryer, White & Cryer, 2003). Call centers are often compared with 18th century "sweat shops" since the employees have to deal with a constant flow of customer calls 24/7. As a result stress has becomes a common concern for call center employees as well as management, due to high demands and constant monitoring (Agnew, n.d.).

Moreover research shows that this stress affects females worse than males. Canada & Brusca's (1992) research shows that a "technological gender gap" exists as males and females have different attitude towards technology that affects their motivation to learn the use of such technology. Another research by Dorup (2004) on medical students of Denmark reveals that males have more favorable attitude towards latest technological advancements. Almost 47 % males in his sample wanted to replace traditional teaching with computers as compared to only 22% of females. Moreover various other researchers also found 'technological gender gap' since 1980s (Young, 2000 as cited in Hale, 2001). As a result when faced with the use of modern technology females feel more stressed out as they believe it is not their areas of expertise (due to media and society's depiction of males as being expert in the use of technology) and they are most likely to fail.

However, even though research shows that females generally shy away from the use of technology techno-stress can be severely de-capacitating for both males as well as females. Especially when more and more call centers are opening up around the world and thousands and thousands of workers are being employed by this expanding industry in which the workers are forced to take and make calls one after another, sitting in front of computer monitors for the entire length of their shift, where supervisors constantly monitor their performance electronically. Thus making stress an ever increasing phenomenon in call centers (Sprigg and Jackson, 2006; The Times, 1998).

Moreover, this stress further increases depending on the type of call centers employees are working in i.e inbound or out bound call center. Inbound call centers exclusively or predominantly handles inbound calls (calls initiated by the customer) and generally receives incoming product support or information inquiries/complaints from consumers. Whereas, outbound call centers are the ones in which call center agents make outbound calls to customers or sales leads. Outbound call centers are operated for telemarketing, solicitation of charitable or political donations, debt collection and market research (Rouse, 2007). Research shows that inbound call center employees experience greater stress as compared to outbound call center employees (Dormann & Zapf , 2004; Goldberg & Grandey, 2007), since outbound call center representatives have some control over their work situation by choosing which customers to call as compared to inbound call center employees who have to take the calls of all customers directed at them diminishing their control over their work situation leading to greater stress (Spector, 2002; Daniels & Guppy, 1994). Moreover outbound call center employees do not have to deal with angry or abusive customers like inbound call center employees, who have no way out, but to take the abuse and try to soothe the customer thus increasing their level of stress. Researches also show that dealing with customers 24/7, who might not be in their best mood, strains the employees resulting in loss of customer as well as employees (Cryer, White & Cryer, 2003; Dormann & Zapf, 2004; Goldberg & Grandey, 2007).

In addition to the type of call center another important factor that affects the stress of employees working at call centers is the type of work shift. Call centers generally operate 24/7 as they deal with customers geographically located in different time zones, thus resulting in having employees working round the clock to appease the customers. Researches show that employees working at non-standard work shifts (such as night shifts) experience higher overall burnout, emotional exhaustion, job stress and health problems than employees on a fixed day shift, due to disruption of body's circadian rhythm (Jamal, 2004).

A survey, carried out by UNISON on call centers in Scotland reveals that almost 75% of call center employees feel stressed leading to greater levels of absenteeism and turnover as compared to any other workplace (Swinton, 2002). Almost 1 in 7 employees leave the industry every year, while other develop various physical as well as psychological problems such as sleeping disorders, loss of voice, digestive problems, repetitive stress injury, headaches and dizziness symptoms of neuroticism, maladaptive and pathological behavior and somatic pathologies (Gans, Koole, & Mandelbaum, 2003; Srivastava, 1999; Swinton, 2002). Other researches reveal that stress produced anger increases aggressive behavior and these negative effects continue even after the stressor is removed. High levels of stress impair people's memory and attention during cognitive activities (Sarafino, 1994; Swinton, 2002). Moreover attempts to cope with the stress can deplete the body of its energy and strength, leaving it susceptible to all sorts of illnesses and pathologies such as heart diseases, ulcers and other such medical conditions (Atkinson, Atkinson, Smith, Bem, & Hoekema, 2000).

Inspite of all these drawbacks the call center are an increasingly important part of today's globalized economy. Riding on this wave, Pakistan's call center industry has been steadily growing. Call center industry crossed $20 million figure during 2005. Some 120 centers have opened in Pakistan in the past two years. Today they employ 3,500 people, and that number is expected to grow by 60% a year (telecompk, n.d.). Therefore vast research is needed to explore the problems faced by call center employees as they have to face continuous stress that can lead to harmful consequences for individuals as well as the organization. This research aims at exploring the level of stress among call center employees in Pakistan with the aim of identify promising directions for future research because once its established that call center employees in Pakistan are experience high levels of stress, future researches can be done on exploring the major causes and ways to reduce their level of stress thus making their workplace more comfortable which might result in improved employee well-being leading to better performance and revenues for the organization. Thus we try to outline important problems that have yet to be fully addressed.

Hypotheses

1) Female employees will experience more stress as compared to their male counterparts.
2) Night shift employees will show higher stress as compared to dayshift employees.
3) Employees of inbound call centers will experience higher stress as compared to employees of outbound call centers.

Method

Research Design

Survey research design was employed to measure the level of stress among call center employees and to see whether stress level varies with reference to shift work, gender and type of call center.

Participants

A purposive sample of 190 Customer Support Representative (106 men & 85 women) was taken from three inbound and three outbound call centres of private sector Telecom companies in Lahore. All the respondents were literate with education ranging from bachelors to masters. The age range of the sample was from 19 – 40 years (*M* = 24.81, *SD* = 3.69). 153 employees (68 men & 85 women) out of 191 were working at dayshift and 38 (men) were from nightshift. Since women were not working at night shift only males were taken from night shift. Out of total 191; 99 employees were taken from inbound whereas 92 employees were taken from outbound call centres. The details of the sample are given in table 1.

Measures

Degree of Job Stress Scale (Chow, 2005) was utilized to measure the level of stress among call centre employees (e.g. I feel tired even with adequate sleep, I feel frustrated in carrying out my responsibilities at work). It is a 20 item self-report Likert type questionnaire and measures individual responses ranging from always to never (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always). Individual responses are then scored and added, and a total score is obtained in order to get a measure of their degree of stress. The scale was developed on a sample of 1590 employees of five organizations rendering variety of services, the alpha coefficient ranged from 0.80 to 0.86, showing very high reliability (Chow, 2005). The reliability alpha coefficient of the scale for the present sample was found to be 0.898 (p < .0001), again representing a very high reliability for this data. The scale was used in its original form in English.

Procedure

The Human resource departments of inbound and outbound call centers were contacted and permission was sought for collecting data from their call centers located in Lahore. After the permission was sought customer support representatives from selected call centers were contacted via their team leads at their workplace. The day and night shift employees were contacted separately because of difference in their work timings. After obtaining their consent questionnaires were given to them in their free time and were collected subsequently after its completion, which took almost 10 to 15 minutes. The questionnaires were then quantitatively configured and scores were obtained for each participant. The scores were then analyzed using SPSS.

Results

This section summarizes and describes the results obtained by analyzing the data using SPSS version 15. In order to test the hypothesis, statistical analysis of student's t- test was employed. Comparisons were made between male and female employees, day and night shift employees, and inbound and outbound call centers employees. Psychometric properties i.e. Alpha coefficient of Degree of Job Stress Scale (Chow, 2005) was determined for the present sample, which was significantly high *(r* = .89, p < .0001).

Table 2 shows that stress level of women (*M* = 47.96, *SD* = 13.49) do not differ significantly from men (*M* = 50.95, *SD* = 13.93), *t* (151) = 1.34, *p* = n.s.

Table 3 shows that level of stress was significantly higher in night shift employees (*M* = 60.23, *SD* = 12.64) as compared today shift employees (*M* = 50.95, *SD* = 13.62), *t* (104) = 3.49, *p* <.001.

Table 4 shows that employees of inbound call centers (*M* = 59.18, *SD* = 14.97) have significantly higher levels of stress as compared to employees of outbound call centers (*M* = 43.17, *SD* = 6.64), *t* (189) = 9.42.

Table 1
Descriptive characteristics of sample (N=191)

Variables	Men		Women	
	f	%	*f*	%
Age				
19-25	60	56.6	69	81.2
26-32	43	40.6	14	16.5
33-40	3	2.8	2	2.4
Education				
Bachelors	50	47.2	35	41.2
Masters	56	52.8	50	58.8
Call center				
Inbound	63	59.4	36	42.4
Outbound	43	40.6	49	57.6
Work Shift				
Morning	68	64.2	85	100
Evening	38	35.8	--	---

Note: percentage of each sub classification is based upon the total numbers of subject in each group. Men = 106 and Women = 85.

Table 2
Gender differences in the stress level of call center employees (N=191)

Variables	*n*	*M*	*SD*	*SE diff*	*t*
Women	85	47.96	13.49	2.23	1.34
Men	106	50.95	13.93		

df= 189, *p*=n.s.

Table 3
Differences in the stress level of morning and evening shift male employees (N=191)

Work timings	*n*	*M*	*SD*	*SE diff*	*t*
Morning shift	68	50.95	13.62	2.65	3.49*
Evening shift	38	60.23	12.64		

df =104,*P< .001*

Table 4
Differences in the stress level of Inbound and Outbound call centre employees (N=191)

Call Center	*n*	*M*	*SD*	*SE diff*	*t*
Inbound	99	59.18	14.97	1.65	9.42*
Outbound	92	43.17	6.64		

df = 189 **p* < .001*

Discussion

The analysis of the results revealed various significant aspects. Firstly, it revealed that almost 40% of the employees working at call centers are experiencing alleviated levels of stress, whereas almost 20 % experienced moderate levels of stress. Such stress is usually caused by tough targets and constant monitoring that adds to the stress levels of call centers employees since they are forced to make or take calls one after another. Moreover the interaction with angry or abusive customers further drains their energy

leaving them vulnerable to stress ultimately leading to burnout. Other researches also confirm these findings of the present study (Cryer, White & Cryer, 2003; Dormann and Zapf, 2004; Goldberg & Grandey, 2007; Sprigg & Jackson, 2006; Swinton, 2002).

Secondly, non-significant differences were found between stress level of men and women working at call centers. While other studies showed that men and women would respond differently to techno-stress as women generally shy away from the use of modern technology and hence would be more susceptible to stress (Canada & Brusca, 1992; Dorup, 2004; Young, 2000 as cited in Hale, 2001). The findings of this research do not corroborate such claims.

Thirdly, the analysis confirmed the second hypothesis that employees working at night shifts will exhibit higher levels of stress as compared to employees working in day shifts. Since working at night disturbs the body's natural biological clock, through disruption of circadian rhythms. These results are in line with the research done by Jamal (2004).

Fourthly, the analysis of the data confirmed the third hypothesis that employees of inbound call centers will experience higher levels of stress as compared to employees of outbound call centers. This is due in part to the reason that inbound call centers employees are subjected to greater customer hostility while receiving customer complaint calls resulting in increasing their level of exhaustion and the number of errors made during the call; thus burgeoning their stress. Such results are in line with the researches done by Dormann and Zapf (2004) and Goldberg and Grandey (2007).

This research has significant implications for call center employees and management as researches show that stress can have various harmful consequences leading to physiological and psychological disorders such as headaches, high blood pressure, vulnerability to heart diseases, stomach discomfort, ulcer, symptoms of neuroticism, maladaptive and pathological behavior and somatic pathologies, difficulty in relaxing or falling asleep, headaches, stomach discomfort, backaches and more serious health problems (Atkinson, Atkinson, Smith, Bem, & Hoekema, 2000; IDEA Health & Fitness Source, 2000; Gans, Koole, & Mandelbaum, 2003; Sarafino, 1994; Srivastava, 1999). Various researches have demonstrated that stress produced anger increases aggressive behavior and these negative effects continue even after the stressor is removed (Sarafino, 1994).

Moreover stress is the biggest cause of low productivity, absenteeism and turnover among call center employees (Gans, Koole, & Mandelbaum, 2003; Swinton, 2002). Therefore, the management of call centers must take reasonable efforts to reduce the levels of stress experienced by their employees. As it not only affects the employees but also the management since they have to deal with issues such as absenteeism, employee retention and health claims. Moreover stress leads to aggression in employees leading to more errors and loss of customers, which can result in not only creating a bad reputation for the organization but will also lower the profit margins. Thus stress reducing mechanism must be administered and regular stress reduction workshops and exercises be conducted for call centers employees so that they learn to manage and cope with their stress in a productive manner.

Conclusion:

Call centers employees face alleviated levels of stress, and such stress increases with the type of call center and with the shift timing. Therefore, reasonable measures must be taken to reduce such stress by giving more breaks during shifts and rotating the shifts among employees, otherwise the management might lose valuable employees and customers.

Limitations and Future Suggestions

This research aimed at exploring the level of stress among call center employees and how the level of stress varies with reference to gender, type of call center and shift work, however it did not look into the reasons for alleviated levels of stress among call center employees. Therefore, future research is needed that can build on this research by exploring the reasons for increased level of stress among call center employees in an indigenous context and suggest ways of eliminating the stress.

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