

Full Length Research Paper

Addressing health related challenges faced by the business process outsourcing (BPO) employees by stress

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Business process outsourcing (BPO) is one of the fastest growing segments of the Information Technology Enabled Services (ITES) industry. BPO is a strategy which promotes in a unique way either by putting-in new technology or applying existing technology to improve a process. India in the recent years has shown huge developments in the areas of communication, power and software developments. Despite this, the industry has typically created more stress among its workers, letting them to face a lot of physical, mental and moral ethical related issues. Hence this study made an attempt to study the physical and health related stressor problems. This paper has represented problem faced by the BPO employees in India

Key words: BPO, health related stressor, IT and ITeS and work related stressor.

INTRODUCTION

Business process outsourcing (BPO) is defined simply as the movement of business processes from inside the organization to an external service provider. With the global telecommunications infrastructure now well established and consistently reliable, BPO initiatives often include shifting work to international providers. Five BPO international hot spots have emerged, although firms from many other countries specialize in various business processes and exporting services. They are: 1. India, engineering and technical; 2. China, manufacturing and technical; 3. Mexico manufacturing; 4. United States, analysis and creativity; 5. Philippines, administration. Each of these countries has complex economies that span the range of business activities, but from a BPO perspective; they have comparative advantages in the

specific functions cited. With a strategy to eliminate non-core functions because of the job shift that accompanies the quest to employ the highest-valued talent, BPO has both been hailed and vilified.

Business executives and owners see it as a way to eliminate business processes that are not part of their organization's core competence. Back-office functions, such as payroll and benefits administration, customer service, call center, and technical support are just a few of the processes that organizations of all sizes have been able to outsource to others who specialize in those areas. Removing these functions from their internal operations enables organizations to reduce payroll and other overhead costs. In an era when executives have been admonished by business commentators and analysts to

focus on core competencies, BPO offers an opportunity to achieve that goal in a dramatic new way.

India in the recent years has shown huge developments in the areas of communication, power and software developments. It has already established itself as a global BPO hub and is fast becoming a popular outsourcing destination for major manufacturers across the globe. Our country is fast emerging as a winner in this outsourcing services hype. Today, the US based companies are ranking India to be their first choice as an offshore outsourcing destination. India stands as one of the major players in the outsourcing industry, in terms of well educated, talented, low cost and English speaking workforce, excellent IT and networking infrastructure, a fairly stable political scenario, friendly laws and well laid taxes and quality certified software firms

Despite this, Benner (1987) explains that, this industry has typically created more stress among its workers making them to face a lot of physical, mental and moral ethical related issues. Medical research has shown that as much as 90 percent of illness, poor health and disease are stress-related. BPOs employees' daily experience is "burnout" due to the repetitive nature of their work and un-ending nightshifts. According to BPO employee survey conducted by Data quest (2004), BPO services are ranked high for attrition due to health reasons, such as sleeping disorders (83%), ear problems (8.5%) and eye sightedness problems (10.6%). This would lead to researches on this issue and find out what is the stress level faced by the workers in the BPOs at Chennai. Hence, this study has proposed to find out the work related stress faced by the BPOs Worker at Chennai, since Chennai is the major hub for the BPO industries in Tamil Nadu.

This paper consists of five parts: first part is the introduction of the study, which consists of BPO evolution, problem focussed and objectives of the study. Second part of the study is the review of literature which includes meaning of stress, various stress and research done by various researchers. Third part of the study discusses the BPO industry in the study area. Fourth part of the study discusses the detailed research methodology undertaken, while the fifth part of this paper explores the analysis, discussion and conclusion.

BPO evolution

BPO has evolved far from these IT-specific roots and now encompasses nearly every business process. The implementation of a BPO initiative will always involve a technology component, just like the implementation of the benefits of a local beer distributor at the administrative office. The point is, nearly every modern business innovation comprises both a technical and social component. Decision making, strategy setting, service delivery and virtually every other business activity are

now socio-technical in nature, involving humans interfacing with technical systems. BPO is like that. Fundamentally, then, BPO is a socio-technical business innovation that provides a rich new source of competitive advantage. By socio-technical, we mean that BPO requires skillful management of people and technology (hardware and software). The manager who initiates a BPO strategy must find effective ways to introduce people to technology; but many executives and managers shy away from BPO because they wrongly believe it to be a technical innovation—one better left for the chief information officer (CIO) or other technology administrators. In part, this belief results from the IT origins of BPO. Many early adopters of outsourcing were those who needed software development expertise or who sought technical expertise for staff's help desks and call centers. During the 1990s, the labor pool for such talent in the United States was tight, prompting many leading companies to search abroad for the personnel they needed. These organizations turned to international labor markets, where they were able to identify and hire highly skilled technical workers who were far cheaper than their U.S.-based counterparts. Today, the talent shortage in the United States has abated, but the cost savings to be gained by using outsourced talent remain.

Problems focus

India is fast becoming a major outsourcing hub to the world and already has a booming \$ 2.3 billion ITES market. Many organizations like the NASSCOM consulting group and IDC-India have predicted a highly positive development in the industry. Over the last decade and a half India has emerged as a strong provider of IT enabled services (ITeS) to US, European and Asian companies. Governmental agencies from several western countries have also lately begun to embrace IT outsourcing, and much of this business has been directed towards India. As a result, many believe that this would help India to improve its economic and social stability in a major way.

However, Kamp (1992), BPO workers experience various types of stressors affecting their efficiency. Problems at work are more strongly associated with health complaints than any other problems. The BPO services are ranked high for attrition due to health reasons such as sleeping disorders, voice loss, ear problems, digestive disorders and eye sightedness problems. Hence, there is a need to study the work related stressors of the BOP in Chennai.

Objectives of the study

Primary objective

To understand the work related stress across the

employees of BPO services in Chennai.

Secondary objectives

1. To study physiological stressors across BPO service employees in Chennai.
2. To study behaviour and health related stressors across BPO service employees in Chennai

REVIEWS RELATED TO STRESS

Definition and concepts of stress

Pascal says, "It is all of humanity's problems that stem from man's inability to sit quietly in a room alone". Beehr and Newman define job stress as "a condition arising from the interaction of people and their jobs and characterised by changes within people that force them to deviate from their normal functioning". Ivanevich and Matteson define stress simply as "interaction of the individual with the environment", but then they go on to give a more detailed working definition, as follows: "an adaptive response, mediated by individual differences and / or psychological processes, that is a consequence of any external environmental action, situation, or event that places excessive psychological and/or physical demands upon a person". Stress is not an illness in itself, despite the fact that many doctors will put it on a medical certificate. The E.U. Commission's document, "Guidance on work-related stress" defines work-related stress as: "the emotional, cognitive, behavioural and physiological reaction to aversive and noxious aspects of work, work environments and work organisations. It is characterised by high levels of arousal and distress and often by feelings of not coping". The Irish Health and Safety Authority defines stress as arising; "when the demands of the job and the working environment on a person exceed their capacity to meet them".

The U.K. Health and Safety Executive defines stress as: "the adverse reaction people have to excessive pressure or other types of demand placed on them". However, long-term or severe stress can result in actual physical and/or mental illness. This could give rise to the following types of legal complaints: personal injury, constructive dismissal, unfair dismissal, discrimination and disability discrimination. A simplified definition of stress is that it is an adaptive response to an external situation that results in physical, psychological, and/or behavioural deviations for organisational participants. Statt (2004) explains this as follows: When we look at the psychological effects of stress we will find positive, negative and neutral aspects of the term used, illustrating once more that in psychology, so much depends on the context of the phenomenon in question and the nature of

the individual's perception of it. Effects of negative stress on the individual vary based on the study conducted by Siegrist (1998) where he demonstrated a link between high amounts of occupational stress and ill health in individuals.

What causes stress?

A stressor is a stimulus with the potential of triggering the fight or flight response. The stressors for which our bodies were evolutionarily trained were threats to our safety. These stressors are symbolic ones; for example, the loss of status, threats to self-esteem, work overload, or over-crowding. When the boss overloads you with work, it is dysfunctional to fight with him or her and equally ridiculous to run away and not tackle the work. When we encounter symbolic stressors, our bodies are altered in the same manner, although we do not use the changed physiology by responding with some action.

The results are illness and disease when the stress reaction is chronic, prolonged, or goes unabated. This need not be the case. Now stressor is what stress reactivity entails. Stress is the combination of a stressor and stress reactivity. Without both of these components, there is no stress. A stressor has only the potential of eliciting a stress reaction. Imagine two people fired from their jobs. One views being fired as catastrophic, while the other views being fired as less severe. The stressor (being fired) had the potential of eliciting physiological arousal, but only the thought processes employed by the first person would result in such a reaction. By definition, that person experienced stress. The second person encountered the same stressor but perceived it in such a way as to prevent physiological arousal. That person was not stressed.

Meaning of stressors

The events that bring on stress, called stressors, can be positive or negative. Also, the results of stress, which depend largely on how individuals cope with stressful events, may be positive or negative. Tehrani (2002) also reported stressors as: "unsympathetic organisational culture, poor communication between managers and employees, lack of involvement in decision making, bullying and harassment, continual or sudden change, insufficient resources, conflicting priorities and lack of challenge." Fairbrother and Warn (2003)'s study proves that it is not just in the workplace that stress occurs, but of some interest for this study is the recognition that the conflict between home and work, and the work impact on personal relationships, is stressful. Workplace stress can be caused by life-threatening traumatic events. However, it is also caused by chronic work factors such as

excessive job demands, job insecurity, and lack of support for work-life balance. The National Institute of Occupational Safety and Health (NIOSH) in the United States defines workplace stress as “harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or needs of the worker”. Buchanan and Huczynski (2004) summarised some of the typical stressors likely to arise in an organisational context; these included: inadequate physical working environment; inappropriate job design; poor management style; poor relationships; uncertain future; divided loyalties.

Individual stressors

Individual employees have multiple roles (family, work, professions, recreational, church, club, community, and so on), and these often create conflicting demands and expectations. After an extensive search of the empirical research it was concluded “work schedule, work orientation, marriage, children, and spouse employment patterns may all produce pressures to participate extensively in the work role or the family role”. Stress results when the time demands for the work role are incompatible with the time pressures of the family role or vice versa.

Role ambiguity results from inadequate information or knowledge to do a job. This ambiguity may be due to inadequate training, poor communication, or the deliberate withholding or distortion of information by a co-worker or supervisor. In any event, the result of role conflict and ambiguity is stress for the individual.

The annual costs of presenteeism in the UK due to mental health problems are estimated to be around £605 per employee, and are also associated with higher accident rates, work place conflict or poor employee relations, higher insurance premiums, damage to reputation, public and investor relations, and problems with recruitment and retention. Work-related stress levels appear to be increasing. A 2008 national survey for the Chartered Institute of Personnel and Development found that just under one third of organisations had experienced an increase in work-related stress. The economic downturn also seems likely to increase employee's stress levels, with 25% of adults planning to work longer hours and around 12% intending to take on a second job. Research by Bupa (2008) found that 40% of people worried about their job security had experienced higher stress levels at work and almost a quarter were working longer hours to ward off the risk of losing their job. Women were significantly more stressed than men and are feeling more pressured at work. The economic downturn is likely to have an effect on levels of stress as job security becomes more of an issue. According to the study conducted by Dosey and Meisels (1969), “when

stress is too high for comfort, a person would want to place more distance between him and others and thus not increase stress”.

Several recent studies have highlighted the magnitude of work – related stress problems in the United States, as follows

1. Between 75 and 90% of visits to physicians are for stress-related problems.
2. Seventy-eight percent of all U.S employees report that their jobs cause them to experience stress.
3. Forty-five percent of employees surveyed in both private and public sector organisations report suffering from psychological burnout.
4. The cost of stress-related problems in terms of decreased performance, absenteeism and turnover is estimated to be \$ 150 billion per year.

From the aforementioned literature review, it is crystal clear that there are different types of stresses being experienced by the employees working in the IT and ITES industry. It is observed that most studies were conducted in western countries only, only few studies were conducted in the non western countries. Based on this observation, the present paper focussed on work related stress faced by the employees working in the BPO in Chennai

About BPO industry

The hindubusinessline.com believes and Bharti's Prashar too agrees that the BPOs Company will surely gain in the long term. The reason is simple: cost structure is, by and large, the same for an in-house call centre and a third party one. But the savings will become more apparent as the scale of operations grows. Indiatelecomnews.com highlights the NASSCOM-McKinney report which predicted that IT enabled services would account for a mammoth \$17 billion business per year. The report also predicts that in India it might generate 1.1 million jobs and Rs. 810 billion in revenues by the year 2008. The HINDU, Special Report (Jun 16, 2003) quotes that the information technology-enabled services (ITES) sector notched up revenues of Rs. 11,300 crores (\$2.3 billion) in 2002-03, after a 59 per cent growth. Expectations are more conservative for the current year's growth but the pie-in-the-sky, being held out, was in new service areas such as engineering, logistics, sales and legal services, hitherto thinly tapped, which could boost India's current 2 per cent share of the global ITES pie to 4.8 per cent within five years. Mallika (2004) pointed out that the recent study undertaken by a leading newspaper suggests a great demand for BPO services in functional areas like finance, marketing, sales, human resources and administration in the coming years. By the year 2007, Indian BPO companies

would have generated about 600,000 jobs and would be a \$17 billion industry by 2008. Opportunities in the BPO industry are abundant; however, care needs to be taken while opting for a career in BPO vis-à-vis long-term career plans. Mallika (2004) pointed out the growth of BPO in Indian Economy (By Akinchan Buddhodev Sinha). In spite of tough competition, India has emerged as a global leader in the Business Process Outsourcing (BPO) industry. India has the advantage of having large English speaking and computer literate workforce, which are considered as important prerequisites for the success of BPO sector. It explores the factors that have contributed to the success of BPO industry in India. Mallika discusses the initiatives taken by the government including policy concessions, tax exemptions and removal of procedural hurdles to enable the growth of the BPO sector. She also highlighted the future of BPO industry in India, especially its contribution towards GDP, exports and employment generation. The author observes that BPO industry has witnessed transformation from back office service operations to handling core functions and is playing a significant role in growth of the economy.

RESEARCH HYPOTHESIS

H₁: There is a significant difference between the age of the respondents and their health related stressors

Null hypothesis

H₀: There is no significant difference between the age of the respondents and their health related stressors

RESEARCH METHODOLOGY

Study instrument

Bunge (1987) used group interview in his study on stress management. This was found to be appropriate because of the interactive and transactional nature of the individual and the factor of stress. And its validity and reliability has been proven over 30 years since its use. Despite this the researchers have formulated a questionnaire which best suit the non-western countries like India. It consisted of 31 items including personal questions. Each question was well structured to obtain the objectives of the research. Respondents were asked to express the extent of their stress with each of the 31 items on a five point Likert scale ranging from 1=strongly disagree to 5= strongly agree. The internal consistency of the translated questionnaire was 0.89, obtained using Cronbach's alpha coefficient.

Sample

The population for this study comprises BPO employees working in the top ten BPOs in Chennai during the study period. A total of 310

employees were randomly approached with 200 agreeing to take part in the study, resulting in a response rate of 64%. The questionnaires were administered in an interview format to get a high response rate as possible.

Statistical methods

The statistical package for the social sciences (SPSS) version 16.0 was used to analyze the data collected. Analysis consisted of the computation of descriptive statistics in order to examine the different work related stress experienced by the respondents in the BPO.

RESULTS AND DISCUSSION

Demographical background of the respondents

From the demographical table it is understood that 71 respondents are in the age group of 26 to 30 years constituting 35.5%. 29.5% of the respondents belong to the age group of below 25 years and only 13.5% of the respondents are in the age group of above 35 years (Table 1). It is clear that 35.5% of the respondents lie in the age group of 26 to 30 years which is the highest. And 13.5% of the respondents lie in the age group above 35 years which is the lowest of all. Thus it is inferred that the BPO companies catch the attention of employees in the age group of 26 to 30 years (Table 5). There is the lowest percentage of the respondents who continue to be the employees of the BPOs companies who are in the age group of above 35 years. It is further inferred that, BPOs jobs are peculiarly suitable for youngsters who are below 30 years. With regard to the gender of the respondents, it is shown that 129 respondents are females which constitute 65%. Whereas, 71 respondents are males; this constitutes 35%. In respect to the marital status of the respondents, it is inferred that 150 respondents are unmarried, constituting 75%. There are 25% of the respondents who are married. It is inferred from the table that the majority of the respondents (75%) are living unmarried. With regard to the educational qualification of the respondents, 51% of the respondents have completed their under graduate degree course; 25% of the respondents are post graduate degree holders; 5% of the respondents have professional degrees and 13% of the respondents are Diploma / ITI holders. Only 6% of the respondents are other categories. With respect to the income of the respondents, 59% of the respondents are earning a monthly income of below Rs.20, 000. There are 15% of the respondents earning monthly income of Rs.20001 to Rs.25, 000, and only 7% of the respondents are earning above Rs.35000. It is obvious that very low percentage (7%) of the respondents are earning a monthly income above Rs.35000. The highest percentage (59%) of the respondents are earning a monthly income Rs.20, 000. In respect to the experience of the respondents, 51% of the respondents have gained work

Table 1. Demographical background of the respondents.

| Demography | No. of respondents (n=200) | Percentage (100) | Mean | Median | Mode |
|----------------------------------|-------------------------------|---------------------|------|--------|------|
| Age group | | | | | |
| Below 25 yrs | 59 | 29.5 | | | |
| 26 to 30 yrs | 71 | 35.5 | 2.19 | 2.0 | 1.0 |
| 31 to 35 yrs | 43 | 21.5 | | | |
| Above 35 yrs | 27 | 13.5 | | | |
| Gender | | | | | |
| Male | 71 | 35 | 1.64 | 2.0 | .47 |
| Female | 129 | 65 | | | |
| Marital | | | | | |
| Single | 150 | 75 | 1.25 | 1.0 | .43 |
| Married | 50 | 25 | | | |
| Educational qualification | | | | | |
| Under graduate | 102 | 51 | | | |
| Post graduate | 49 | 25 | | | |
| Diploma/ITI | 26 | 13 | 1.91 | 1.0 | .43 |
| Professional | 11 | 5 | | | |
| Others | 12 | 6 | | | |
| Income | | | | | |
| Below Rs.20,000 | 118 | 59 | | | |
| Rs.20001 to Rs.25000 | 30 | 15 | | | |
| Rs.25001 to Rs.30000 | 16 | 8 | 1.91 | 1.0 | 1.18 |
| Rs.30001 to Rs.35000 | 23 | 11 | | | |
| Above Rs.35000 | 13 | 7 | | | |
| Experience | | | | | |
| Below 2 yrs | 102 | 51 | | | |
| 3 to 5 yrs | 74 | 37 | 1.66 | 1.00 | .828 |
| 6 to 8 yrs | 13 | 7 | | | |
| 9 to 11 yrs | 11 | 5 | | | |

Source: Primary data.

experience below 2 years, followed by 37% of the respondents who have work experience of 3 to 5 years. There are only 5% of the respondents, with 9 to 11 years of work experience.

Physical related stressor

1. "The nature of the work does affect my health": Out of the total sample respondents, 51% of the respondents strongly agree and 20% of them agree that the nature of the work they are doing at BPO affects their health.
2. "I do have gastrointestinal problem": The highest

(58%) percentage of the respondents strongly agree with the statement that they have gastrointestinal problem. Only 3% of the respondents disagree with the statement (Table 2).

3. "I am suffering from marginal headache, other aches and pains": Among the total respondents 24.5% of the respondents strongly agree and 11% of the respondents agree that majority of the respondents are suffering from marginal head ache and other aches and pains.

4. "I do have weight loss or gain": Out of the total respondents, 67% of the respondents strongly agree and 5.5% of them agree with the statement. Perhaps there are workers who are facing weight loss and gaining problem often.

Table 2. Employees' opinion on physical related stressor.

| Physical related stress | SA | A | NAND | DA | SD |
|---|------------|-----------|-----------|------------|-----------|
| The nature of the work affects my health | 102 (51%) | 39 (20%) | 24 (12%) | 12 (6%) | 23 (11%) |
| I do have gastrointestinal problems | 117 (58%) | 49 (25%) | 15 (7.5%) | 13 (6.5%) | 6 (3%) |
| I am suffering from migraine headaches, other aches and pains | 49 (24.5%) | 22 (11%) | 1 (.5%) | 70 (35%) | 58 (29%) |
| I do have weight loss or gain | 134 (67%) | 11 (5.5%) | 15 (7.5%) | 25 (12.5%) | 15 (7.5%) |
| I do have sleep disturbances and worry | 70 (35%) | 49 (25%) | 26 (13%) | 12 (6%) | 43 (21%) |

Source: Primary data.

Table 3. Behaviour related stressors experienced by the BPO employees.

| Behaviour related stress | SA | A | NAND | DA | SD |
|--|-----------|----------|----------|----------|----------|
| I do feel like smoking /drinking | 102 (51%) | 49 (24%) | 13 (7%) | 17 (8%) | 19 (10%) |
| I succeed in communicating or listening to others' opinion | 95 (47%) | 62 (31%) | 13 (7%) | 14 (7%) | 16 (8%) |
| I do experience irritability in frequent arguments. | 121 (61%) | 23 (11%) | 25 (13%) | 24 (12%) | 7 (4%) |
| I have a short-temper or violent behaviour | 93 (46%) | 56 (29%) | 13 (7%) | 15 (8%) | 21 (10%) |
| I never have any suicidal tendencies. | 121 (61%) | 36 (18%) | 11 (5%) | 13 (7%) | 19 (9%) |

Source: Primary data.

5."I do have sleep disturbances and worry": Out of the total respondents, 35% of the respondents strongly agree and 25% of them agree with the statement. Therefore, the highest percentage of the respondents are facing sleeping disturbances problem.

Behaviour related stressors

1. "I do feel like smoking or drinking" (Table 3): Out of the total respondents, 51% strongly agree and 24% agree with the statement that working at BPO would stimulate smoking and drinking out of stress.

2. "I succeed in communicating or listening to other people's opinion": The highest percentage (47%) of the respondents strongly agree; 31% of them agree and only 8% of the respondents strongly disagree with the statement 3."I do experience irritability during frequent argument": 61% of the respondents strongly disagree; 11% agree; 12% disagree and only 4% of the respondents strongly agree with the above statement.

4. "I have a short temper or violent behaviour": The highest (46%) percentage of the respondents strongly agree and 29% agree with the statement (Table 4).

5. "I never have suicidal tendencies": Out of the total respondents, 61% are strongly agree and 18% of the respondents agree with the statement

Hypothetical results

The one sample test has represented all the variables used to find out the stress level of the BPO worker. It is

the combination of the variables that is identified as stressors. The results of this test represent that it is significantly correlated ($p < 0.05$) under 2 tailed test. Hence there is a significant relationship among the variables in the stressors.

From the value ($P < 0.05$), the calculated value is less than the table values of all the variables tested. Therefore, the research hypothesis is accepted and the null hypothesis is rejected.

The difference between the age of the respondents and their experience in health related stressor is significant. Therefore age is the one of the factors which significantly correlated with health related stressor

Conclusion

This study examines the effect of work related stress of the BPOs employees at Chennai in Tamilnadu State. Results indicate that the respondents in the age group of 26 to 30 years face work related stress, behavioral stress and health related stress; further it would be found that the overall stress level is high among this age group of employees. The respondents in the age range of 31 to 35 years are facing high level of psychological stress. Also, it was found that level of increasing and decreasing stress positively correlated with the age and gender of the respondents. Male respondents had high level of stress than female because of their working time. Female respondents had high level of psychological stress. Additionally, results indicate that when the various 5 aspects of the stress were examined individually in relation to their personal characteristics, all the tested

Table 4. One-sample test of BPO workers at Chennai experience of the various stressor.

| Various factors of stressor | Test value = 0 | | | | | |
|---|----------------|-----|--------------------|--------------------|---|--------|
| | t | df | Sig. (2-tailed) | Mean difference | 95% confidence interval of the difference | |
| | | | | | Lower | Upper |
| The nature of the work affects my health | 21.239 | 199 | .000 | 2.0750 | 1.8823 | 2.2677 |
| I do have gastrointestinal problems | 22.938 | 199 | .000 | 1.7100 | 1.5630 | 1.8570 |
| I am suffering from migraine headaches, other aches and pains | 29.763 | 199 | .000 | 3.3300 | 3.1094 | 3.5506 |
| I do have weight loss or gain and sweating or chills | 19.212 | 199 | .000 | 1.8800 | 1.6870 | 2.0730 |
| I do have sleep disturbances and worry | 23.380 | 199 | .000 | 2.5450 | 2.3303 | 2.7597 |
| I do feel my habit of smoking /drinking, consuming Pan, Gutkha chewing and drugs. | 21.313 | 199 | .000 | 2.0100 | 1.8240 | 2.1960 |
| I succeed to communicate or listen to others opinion | 22.401 | 199 | .000 | 1.9700 | 1.7966 | 2.1434 |
| I do experience Irritability, frequent arguments. | 21.433 | 199 | .000 | 1.8650 | 1.6934 | 2.0366 |
| I am a short-temper or violent behaviour | 21.891 | 199 | .000 | 2.0650 | 1.8790 | 2.2510 |
| I never have any Suicidal tendencies. | 19.849 | 199 | .000 | 1.8650 | 1.6797 | 2.0503 |

Sources: Primary data.

Table 5. One - way ANOVA difference between the age of the respondents and their health related stressor.

| Physical related stressor | | | | | | | |
|---------------------------|----------------|--------|---------|---------|-----|--------|------------------------------------|
| S/No. | Age | Mean | S.D | SS | Df | MS | Statistical inference |
| | Between groups | | | 91.622 | 3 | 30.541 | |
| 1 | G1 (n=59) | 1.7797 | .98380 | | | | F = 21.728; P < 0.05; significance |
| | G2(n=71) | 2.4366 | 1.64519 | | | | |
| | G3(n=43) | 1.2558 | .44148 | | | | |
| | G4(n=27) | 2.9630 | .19245 | | | | |
| | Within Groups | | | 275.498 | 196 | 1.406 | |
| Health related stressors | | | | | | | |
| S/No. | Age | Mean | S.D | SS | Df | MS | Statistical inference |
| | Between groups | | | 64.531 | 3 | 21.510 | |
| 2 | G1 (n=59) | 1.7797 | .98380 | | | | F = 16.550; P < 0.05; significance |
| | G2(n=71) | 2.4366 | 1.64519 | | | | |
| | G3(n=43) | 1.2558 | .44148 | | | | |
| | G4(n=27) | 2.9630 | .19245 | | | | |
| | Within groups | | | 254.749 | 196 | 1.300 | |

Sources Primary data.

variables were positively correlated. This indicates that employees working under BPO are experiencing stress. In generally, it can be said that the results of this study indicate the extent of the moderate levels of work stress that exist among the employees working in BPO in Chennai, Tamilnadu State.

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