

Impact of Mental State of Purchasing Professionals in Playing their Role in Supply Chain Management



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In the history of Supply Chain literature, various perspectives of Finance, Operations & Marketing have been addressed so well, however very little research was carried out from the view point of Human Resources. This research is an endeavor to address this small gap. The objective is to understand the various states of mind of purchasing professionals, the key area of the SCM, with particular interest in how collaboration demands, innovation, technological changes, etc. are influencing emotional aspects in the purchasing management. It will also examine whether these sophisticated facilitation concepts & tools have created ease or further demands on human performance.

Key Words: Occupational Stress, Purchasing Professionals, Supply Chain Management, Work related stress in Private Sector

1. Introduction

1.1 Background of the Research

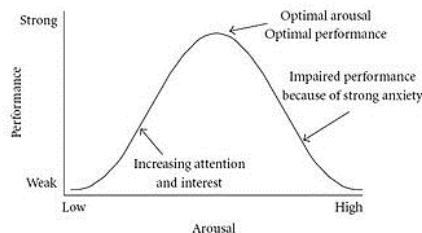
Mental State of an individual, in general, can be defined by the current state or condition of mind or mental health of an individual at some particular point of time. However, this definition has more of psychological/ psychiatric aspect. If we consider the management perspective of a human mind, the term mental state has been observed to have a very important/significant driver, called mental stress, which can be thought of as resulting from an “imbalance between demands and resources” or as occurring when “pressure exceeds one's perceived ability to cope (Richard Lazarus, Susan Folkman, 1984)

Past study had observed that the Common internal causes of stress are Chronic worry, Pessimism, Negative Self talk, Perfectionism or Unrealistic expectations, Lack of flexibility / Rigid thinking, All or Nothing attitude etc. It also revealed that the Common external causes of stress can be attributed to causes like Major Changes in Life, School or Work, Difficulties in Relationship, Financial Problems, Being too busy, Family and Children related causes and so on.

This research aims at reviewing the current evidence on work related stress in a systematic manner, and its relation with the occupational stress of purchasing professionals, it is pertinent to find various external causes of work related / occupational stress. World Health Organization's (WHO) has identified the work-related stress as a response of people at some situation when the required standard/magnitude of works are not matched to their knowledge, skill sets and competencies, that in turn poses great challenge at work place. Work pressure may be associated with a varied degree of work circumstances and even becomes more intense when the situation is evidenced with very little or no support from the environment/ boss/ colleagues or even not controllable to a great extent. Work pressure can also be perceived as acceptable by an individual to the extent to which it can keep an employee alert, motivate and challenge them to learn new things and grow within the constrained resources and help develop their interesting personal characteristics. It is considered healthy as long as it can lead to some success or overcoming obstacles. However, this pressure may turn into stress, when its degree and magnitude seems to be unmanageable under any circumstances and may lead to some serious impact on health and very serious adverse impact on professional performance.

1.2 Types of Stress

Distress is the most commonly referred to type of stress, with negative implications, whereas eustress is usually related to desirable events in a person's life. Selye first differentiated the two in an article he wrote in 1975. Selye argued, in this article, that the persistent stress that is not resolved through coping or adaptation should be known as distress, and it may lead to depressive behavior, withdrawal, and anxiety. In contrast, if stress magnifies one's functioning it may be considered eustress. Both may be equally taxing on the body. Both are cumulative in nature, depending on a individual's way of adapting to the stressor causing it.

Table 1.2 Yerkes–Dodson Curve for a Difficult Task

Source- <http://en.wikipedia.org/wiki/Eustress>

As observed by the previous studies Signs and Symptoms of distress can be classified as following symptoms:-

- **Behavioral symptoms:** (1) Nervous habits (e.g. nail biting, pacing) (2) Eating more or less, (3) Using alcohol, cigarettes, or drugs to relax, (4) Sleeping too much or too little (5) Procrastinating or neglecting responsibilities, (6) Isolating yourself from others
- **Physical symptoms:** (1) Frequent colds, (2) Aches and Pains, (3) Loss of sex drive, (4) Diarrhea or constipation, (5) Chest pain and rapid heartbeat, (6) Nausea and dizziness.
- **Cognitive symptoms:** (1) Constant worrying, (2) Memory problems, (3) Anxious or racing thoughts, (4) Inability to concentrate, (5) Seeing only the negative, (6) Poor judgment
- **Emotional symptoms:** (1) Depression or general unhappiness, (2) Moodiness, (3) Sense of loneliness and isolation, (4) Irritability or short temper (5) Feeling overwhelmed (6) Inability to relax, Agitation.

1.3 Motivation of Research

Now, considering the background of the authors of this paper and one of the authors engagement in voluntary work on stress management, the combination of Purchasing function (important function of supply chain management) and mental states (distress and afflictions) have been the inspiration and driving force of this research. As both the authors have work exposure in Mumbai city which has been ranked as number one in the afflictions by high stress levels among all the metro cities in India with reference to the above survey conducted by ASSOCHAM, the interest is further reinforced.

2. Objectives of the Study

- I. The objective of the study was systematically reviewing the current evidence on work related stress, burnout, and mental health for the effectiveness of study on occupational stress of purchasing professionals.
- II. The purpose of this study was also to carry out an in depth study of the past literature on occupational stress with emphasis on manifestations as well as the symptoms of strain that facilitate identification of problem, recognition and delineation of the stressors experienced by purchasing professionals and coping behavior among them, and thereby develop a deep insight into that.
- III. The study also intends to provide some guidelines towards improving the mental state of supply chain professions in general and the purchasing professionals in particular which will in turn may improve the overall supply chain performance.

3. Research Methodology

The systematic review was carried out over a period of few months, and was completed by November 2014. This review was focused on identifying sources of work related stress and symptoms of severe work related stress in purchasing profession by reviewing research papers on stress, mental health and job performance. Studies included were research articles undertaken in different journals, conferences at national and international level by psychiatrists, psychologist, researchers and social science professors. Whenever the studies related to purchasing profession, in specific or supply chain management function in general were not found, more generic studies relating to general management functions have been considered as a basis.

3.1 Literature Review

For the purpose of establishing a conceptual framework, a comprehensive literature review has been carried out.

Marina Ciccarelli, Trevor Goddard and Judith Merritt, in their paper ‘Minimising Mental Stress among Workers’ brought forward how technological improvement / advancement, globalization with respect to the work, etc. are contributing to the occupational stress.

J.D.Prabu , T. Ramesh Babu, and K.Vimalanathan in their paper ‘A Study on Night-shift Schedule Effect in Human Health and Well Being By Considering Ergonomics’ conclude that based on the factor loading analysis, totally 10 factors were affecting the human health and well-being in night shift work at BPO sector. These factors were general health and fitness, eating habits, short duration to complete a task, sitting posture and arrangement, sleep quality, sleep period, Lack of memory, depression, stress / mental load, and decision making. The paper shows that, most of the cognitive ergonomic factors were

highly contributing to affect human health and well-being in the BPO sector is because working with permanent night shift schedule. Ultimately other factors such as physical ergonomic, nature of job, and personal factor effects were very less in the BPO sector.

M.Vivek, S.Janakiraman, in their paper 'A Survey on Occupational Stress of Bank Employees' concludes "Studies regarding bank employees' occupational stress are on a constant rise for the past few years thereby explaining us why the study is the need of the hour."

Prof. (Dr). T. Velnampy, Aravinthan. S.A, in their paper 'Occupational Stress and Organizational Commitment in Private Banks: A Sri Lankan Experience', observed, "... management, from the organization's standpoint, may not be concerned when employees experience low to moderate levels of stress. The reason is that such an extent of stress may be functional and lead to higher employee performance (Benson and Allen. 1993). But, high stress levels or even low levels sustained over long periods can cause to reduce employee performance and thus, require action by management- Correlation analysis indicated that organizational commitment is positively correlated with the components of occupational stress such as organizational factors, job design, career development, management practices, and social stressors except physical environment. Further, occupational stress found to be correlated with continuance type of commitment. ..."

Dr. Ipseeta Satpathy, Dr. B. Chandra Mohan Patnaik, Ms. Bonita Mitra in their paper 'Stress Management Modalities In IT Sector', concludes "A person with stress cannot discharge his work life balance properly. The stress and human life go side by side. Nobody is liberated from stress. All are experiencing this aspect in some way other. A high profile employee or a low profile employee both will have stress but the nature of the stress may be different. It is not that only people at higher position will have only stress. The whole stress management to some extent relies upon our own attitude towards our life. If our attitude is positive and the outcome of the attitude will be also positive. The employees and employers, both, in this direction, should attempt to reach the break-even. It is also found that in IT sector the burnout issues are more. There is a requirement for creating positive work environment for the betterment of employees and ultimately this will help to reduce the stress level".

K. Chandraiah, S. C. Agrawal, P. Marimuthu and N. Manoharan, in their paper 'Occupational Stress And Job Satisfaction Among Managers', concludes "Individuals under excessive stress tend to find their jobs less satisfying. Some of such individual's intrinsic or extrinsic needs may be thwarted or not met adequately. Confirming many studies in the literature (Hollingworth et. al. 1988; Keller, 1975), the findings of the present study also disclose the same. The subjects having lower job satisfaction were found to experience more stress in the form of overload, role ambiguity, and role conflict, powerlessness, under participation, and low status compared to those with higher job satisfaction. Therefore, age was found to be of significance in these study findings. The results of the study reiterate the significance of demands at each career development level as pointed out by Hallingworth and the persons encounter crisis at each developmental stage as hypothesized by Erickson. Significantly, diminishing stress and growing job satisfaction with increasing age was found among the managers and these confirm the importance of the developmental process".

Sapna, Dr. Ved Prakash Gabha, in their paper 'Occupational Stress among the Engineering College Teachers in Punjab, India' concludes "Teachers have always been the centre of attention in the classroom, yet ironically their concerns and needs have not always been addressed in the same way. Work stress is a real challenge for college teachers and their employing institution. As institution and their working environment change, so, there may be change/s in the kinds of stress problems faced by the employees. It is important that the workplace is being continuously monitored for stress problems. So, it has been discussed, in this paper, about various occupational stresses among engineering colleges in Punjab, India."

Dr. S. S. Jeyaraj, in his paper 'Occupational Stress among the Teachers of the Higher Secondary Schools in Madurai District, Tamil Nadu' concludes "The present study has provided comprehensive information about occupational stress among the teachers of government and aided schools in Madurai district in the state of Tamil Nadu. Occupational stress in the workplace is becoming a major concern for government, all teachers, and headmasters, due to the occupational health and safety legislation/s requiring employers to practice "duty of care" by providing teachers with safe working environments which also cover the psychological well-being of their staff. The reduction of occupational stress will induce the teachers to provide efficient and effective service to the society.

Past literature indicates that for the betterment of the educational institutions the occupational stress among the higher secondary school teachers should decrease. As a result of the advantages of a systematic and joint approach to reducing stress there can be increased education standard, reduction in absenteeism, increased schools' enrollment, reduced drop-out rate, improved teachers morale, reduction in compensation claim and decrease in workplace accidents. The most important benefit in reducing occupational stress is that it will promote a pleasurable work environment for all. The study throws light on the fact that occupational stress is quite a personal matter and that the perception of the situation enables one to cope effectively with it, being conscious of the reasons of occupational stress and monitoring properly."

A.Q. Chaudhry, 'Analysis Of Occupational Stress Of University Faculty To Improve The Quality Of Their Work Journal of Quality and Technology Management', concludes "The detailed analysis bring forward number of suggestions for the policy makers of universities, deans or managers of universities, faculty members of universities in private and public sector/s. They should take inputs from faculty members to manage their stress and should take decision in the light of their inputs.

Previous study has shown that the policy makers of universities should make different strategies to cope with stress; deans of universities should launch specific training to manage the behaviors of disruptive people and encourage involvement of faculty in decision making; faculty members of universities should adopt smooth communication especially in lecturers or assistant professors or associate professors or professors and share professional experience with colleagues; private

universities should provide fair promotion based upon teaching and research experience; and should held extensive training on stress management techniques for different cadres of university teachers.

The literature reveals that the policy maker allocates reasonable funding to manage their work stress. They should chalk out strategies and plans which could minimize their level of stress at work. The Deans and Academic Heads of the Universities should have friendly relationship with their teachers and should encourage and supportive collaborative culture in their respective departments. The course allocation to the teachers should be made according to the choice, experience & competency of the teacher which will certainly minimize the level of stress and will improve their quality of work. They should be provided specific training/s to manage their stress.

Study had also shown that the involvement of the faculty members in different polices, plans, activities and decision making will improve their quality of work. The decision makers of the Universities should encourage the research culture and facilitate the researchers to improve the quality of research work. In this regard, special incentives should be provided to the University's faculty to increase their involvement in the research work."

Bushara Bano, Rajiv Kumar Jha, 'Organizational Role Stress Among Public and Private Sector Employees: A Comparative Study' concludes "Our study has led us to conclude that employees in both the public and private sectors face moderate levels of stress, of which they are subject to role erosion the most and resource inadequacy the least. Further, there is no significant difference in total role stress among public and private sector employees. These results support the findings of a number of earlier studies, e.g., Macklin et al. (2006), although we have noted that private sector employees facing slightly more stress than those in the public sector. Our analysis of the impact of various socio-demographic factors on stress level reveals that educational qualifications and work experience have a significant impact on employees' stress levels."

Prof. Poonam Kapade-Nikam, Prof. Mohsin Shaikh, in their paper 'Occupational Stress, Burnout and Coping in Police Personnel: Findings from a Systematic Review' concludes "the occupational stress has led to the development of negative outcomes for the individual employee and the employing organization. Degradation of general well-being as well as levels of satisfaction and commitment to the organization has each been identified as a result of the employee experiencing occupational stress. The results of stress are harmful to people, society and organizations. High levels of stress will cause negative effect on employees physical and mental well-being ultimately shows effect on performance. Many studies show that organizational factors are more responsible for stress than to physical hazards on the job."

Naomi Lawless and John Allan, in their paper 'Understanding and reducing stress in collaborative e-Learning' put forward how technology and collaboration need enhance the mental stress.

Mara Mather and Nichole R. Lighthall, in their paper 'Risk and Reward Are Processed Differently in Decisions Made under Stress' concludes "... First, stress enhances learning about positive outcomes but impairs learning about negative outcomes of choices. ... Second, when decisions must be made under uncertainty and risk, stress alters decision strategies. But, it does so in opposite ways for men versus women. ..."

Sandeep Nemlekar, the present author, (www.facebook.com/DeepArchanConsultancy) has been continuously supporting Samaritans Mumbai Helpline, for persons in distress / depression / despair, by conducting several awareness programs for public & private sector employees, consumers associations, women's self-help groups, senior citizens groups, educational institutes, religious institutes, etc. Nemlekar (September 2013) shared his views on 'Emotional Aspects of Procurement Strategy' in Procurement Strategies Forum organised by Kamikaze B2B Media.

3.2 Secondary Research

As per a recent survey conducted by ASSOCHAM (The Associated Chambers of Commerce & Industry of India) on occasion of World Health day (April 7th) 2013

- "Almost 85% of employees in private sectors are afflicted to life-style, chronic diseases & acute ailment.
- The more and more demanding schedules and high stress levels are leading to sleep disorders in private sector.
- While afflicted Government employees ranging below 8%
- Mumbai ranks first afflicted to high levels of stress in private sector followed by Delhi (second), Ahmedabad (third) Chandigarh (fourth), Hyderabad (fifth), Kolkata (sixth) and Chennai (seventh) etc.
- 45% of corporate employees in private sector sleep less than 6 hours on daily basis due to work related pressure.
- Loss of sleep has wide ranging effects including physical discomfort, daytime fatigue, psychological stress, low pain threshold, performance deterioration, & increased absenteeism"
- Further, the website, list25.com, provides the following ranking of the most stressful jobs. List25 says about itself "List25 combines the pursuit of interesting intriguing facts with the innate human desire to rank and list things". It adds "We currently have 260 thousand likes on Facebook, 1 million subscribers on our YouTube channel, over 22 thousand followers on Google+, and Over 12000 followers on twitters".

- 1) Enlisted Military personnel
- 2) Police Officer
- 3) Miner
- 4) Taxi Driver
- 5) Firefighter
- 6) Commercial Airline Pilot

- 7) Newspaper Reporter
- 8) Photojournalist
- 9) Loss Prevention Officer
- 10) Mental Health Case Manager
- 11) Medical Professional
- 12) Chaplain
- 13) Assisted Living Manager
- 14) Military General
- 15) Purchase Agent
- 16) Social Worker
- 17) Athletic Coach
- 18) Barista
- 19) Veterinarian Assistant
- 20) Teacher
- 21) Benefits and Payroll Administrator
- 22) Job Coach
- 23) Concierge
- 24) Public Relations Executive
- 25) Senior Corporate Executive”

4. Observation and Findings

Though Supply Chain Management has been studied quite well from the perspective of Finance, Operations & Marketing, lesser studies have happened from the point of view of Human Resources Management. Implementation of various strategies by human resources is quite challenging even in a single organization due to inter-departmental and cross-functional disagreements. In supply chain management, many organizations are various parts of the chain. So, the interactions and interrelations become quite complex as human relations. So, when the concepts of Human Resources Management are applied in Supply Chain Management, a simplistic approach is adopted to consider an enterprise as a unit rather than an individual person/s. Such approach may be quite inadequate.

Supply chain Management spans procurement, manufacturing and distribution (Lee & Billington 1995). Purchasing is an importance function and the enterprise's interface with suppliers. So, collaboration with suppliers is handled through Purchasing. Such collaboration is backed by technology (e.g. internet, telecom). The collaboration and technology cause mental stress.

Craig Brod, a leader in the field of techno-stress research, states that techno-stress is "...a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy way." The reasons for techno-stress amount to: (1) The rapid change in technological, (2) inappropriate / inadequate training, (3) an increased workload, and (4) the reliability of hardware and software, (5) lack of standardization within technologies.

Globalization of supply chains resulted in additional demands of understanding & responding to diverse needs with respect to cultures, laws, geographies, etc. It has also made professionals work in unnatural time zones. It was seen during literature review how working in night shifts affect the mental health.

Due to enhanced competition, due to Liberalization, human mind needs to be in creative mode always. However, creativity may need some periods of tranquility just prior to new ideas to emerge. Stress is well-known as a creativity killer, as per psychologist Robert Epstein, PhD. Time constraints are another, says Epstein, author of "The Big Book of Creativity Games" (McGraw-Hill, 2000).

Demands for innovation to stay competitive are an essential part of modern supply chain management. Innovation means something new or different (method / thing) introduced. It leads to a change. Any change gives mental stress as psychiatrists Thomas Holmes and Richard Rahe, in 1967, after examining the medical records of over 5,000 patients, found that a positive correlation of 0.118 was existing between life events and illnesses.

As reviewed in literature, mental stress affects decision making under uncertainty / risk. Considering significance of risk assessment and risk management in supply chain management, mental stress has serious relevance.

5. Final Conclusion and Future Direction

Substantial Studies regarding employees' occupational stress are available for explaining why the study is the need of the hour. However, more studies have been found with respect to specific industries such as banking and education or government organizations such as police. Very small number of studies may be available about specific business functions such as supply chain management and purchasing. The future studies can pay more attention towards primary data on purchasing professionals' occupational stress by addressing the above listed limitation.

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